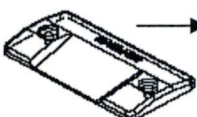
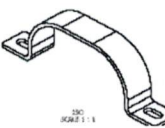

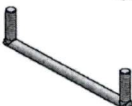




Quantities per PAIR

Part Name		HTC P/N	BP4466	BP350	BP130
PADS	Pad /BP44	314-0001-01	2		
	Pad /BP350	314-0018-01		2	
	Pad /BP130	314-0024-01			2
HARDWARE	Plastic bag 8x10	na	2	2	2
	 Rear Filler block/BP44	314-0022-01	2		
	U-Clip / BP44	314-0006-15	4		
	U-Clip / BP350	314-0019-15		6	
	U-Clip / BP130	314-0026-15			4
	 Low U-Clip/ BP44	314-0023-15	2		
	Shrink on U-Clips	314-0021-01	6	6	6
	 L-Clip/BP130	314-0025-15			4
	 Iceblade	263-0005-15	4	8	8
	 Slotted clip support	314-0007-15	0	12	12
	Bolt - AN4-14A	261-0001-17	4	12	12
	Bolt - AN4-15A	261-0002-17	4		
	Bolt - AN4-16A	261-0003-17	4		
	Nuts - MS20365-428 equiv: AN365-428A or MS21044N4	262-0001-17	20	28	28
	Washers - AN960-416	263-0001-17	32	40	40
	Filler block 1/4"	314-0012-01	4	12	
	 Filler block 1/16"	314-0014-01	16		
	Filler block 1/8"	314-0015-01	4		12
DOCUMENTS	Plastic bag 9 x12	na	1	1	1
	Document - MDL/BP44	HTC-MDL-BP-R44-1000	1		
	Document - INST/BP44	314-0011-00	1		
	Document - MDL/BP350	HTC-MDL-BP-AS350-1000		1	
	Document - INST/BP350	314-0018-01-S		1	
	Document - MDL/BP130	HTC-MDL-BP-EC130-1000			1
	Document - INST/BP130	314-0031-00			1
	Can STC	na	1	1	1
	US STC	na	1	1	1
PACKAGING	Box / BP44 16.5x13x3.5"	na	1		
	Box / BP350 & BP130 24x21x3"	na		1	1
	Label /BP44	273-0001-04	1		
	Label /BP350 & BP130	273-0002-04		1	1

Nature of modifications: Modified BP44 for BP4466

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
26	112-0001-00 F	BP44 for R44 & R66 Bearpaw Assy	HTC-LNF- 170501-01 HTC-LNF-yymmdd-seq
Includes:			
	SEE ATTACHED EXCEL SHEET		LN-
	FOR DETAILED LIST OF COMPONENTS		LN-
	& LOT NUMBERS		LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	All	920 components present in correct qty	
B		All documents present	
C		All LN match used list	
D		Boxes correctly identified	
E			
Inspection Plan approved by: <i>[Signature]</i>			Date: 2017-07-07

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2017-07-07	23	✓ mpc	✓ mpc	✓ mpc	✓ mpc		① to ②3
2017-07-07	3	✓ mpc	✓ mpc	✓ mpc	✓ mpc		②4, ②5, ②6

Release certificates issue

Release Certificates issued: <input checked="" type="radio"/> yes <input type="radio"/> no	By: <i>[Signature]</i>	Date: 2017-07-07
Comments:		
HTC-LNF- ① to ②6		

HTC-RC-170501-01																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																				
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Line 4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	2	3	4	1	1	1	1	1	1	U-shaped Clips	314 0006 15	C	4		26	104	LN-170406-01	92	LN-141205-01	4	LN-131015-02	4	LN-160422-02	4																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																											
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HTC-RC-170501-01																											
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Line 4	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Line 5	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Line 6	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Line 7	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Line 8	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
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Line 10	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1	1
Line 11	1	2	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3	3
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HAS YET TO BE PLACED IN THE BAG

→ Washers en route from Aircraft Spruce (x200)
 PO MPC-20170628

170 + 40 + 6
 17 + 4 + 6

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
20	112 0001 00 F	BP441a R44+ R66 BEARPAW ASSY	HTC-LNF-160330-01 HTC-LNF-yymmdd-seq
Includes:			
	SEE ATTACHED EXCEL SHEET	LN-	AUDIT TC 2017
	FOR DETAILED LIST OF COMPONENTS	LN-	
	AND LOT NUMBERS	LN-	
		LN-	
		LN-	
		LN-	

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	ALL COMPONENTS PRESENT & IN CORRECT QTY	
B		ALL DOCUMENTS PRESENT	
C		ALL LN MATCH USED LIST	
D		BOXES CORRECTLY IDENTIFIED	
E			
Inspection Plan approved by: N. Barleau			Date: 2016 04 28

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2016 04 28	20	OK NB	OK NB	OK NB	OK NB	—	

Release certificates issue

Release Certificates issued: yes no	By: N. Barleau	Date: 2016 04 28
Comments:		
HTC-LNF- (01) TO (20)		

HTC-RC-160330-01

																					P/N	Rev	par pair e	+Sp ares	Nb paires req	Qté totale pièces	Lot 1	Qty	Lot 2	Qty	Lot 3	Qty	Lot 4	Qty	Lot 5	Qty																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																	
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L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bolts AN4-15A	261 0002 17	A	4		20	80	API LOT 84339/73335	80										80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
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L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Nuts	262 0001 17	A	20		20	400	API LOT 86168/724056	400										80																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17	A	32	2	20	680	API LOT 87914/SA5217	680										400																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																																															

D. Baileau

2006 04 28

Traceability data

Qty	Part No.	Desc:	Lot number
20	112 0001 00 F	BP44 for R44 + R66 BEARLAW ASSY	HTC-LNF-141127-01 HTC-LNF-yyymmdd-seq
Includes:			
	SEE ATTACHED EXCEL SHEET		LN-
	FOR DETAILED LIST OF COMPONENTS		LN-
	& LOT NUMBERS		LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	ALL COMPONENTS PRESENT & IN CORRECT QTY	
B		ALL DOCUMENTS PRESENT	
C		ALL LN MATCH USED LIST	
D		BOX CORRECTLY IDENTIFIED	
E			
Inspection Plan approved by: D. Barleau			Date: 2014 11 27

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2014 11 27	20	OK DB	OK DB	OK DB	OK DB	-	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: D. Barleau	Date: 2014 11 27
Comments:		
HTC-LNF-(01 TO 20)		

[illegible]

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
20	112 0001 00 F	BPAA for 4A + 6C Bearing Assy	HTC-LNF- 131025-01 HTC-LNF-yymmdd-seq
Includes:			
	SEE ATTACHED EXCEL SHEET		LN-
	FOR DETAILED LIST OF COMPONENTS		LN-
	& LOT NUMBERS		LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	ALL COMPONENTS PRESENT & IN CORRECT QTY	
B		ALL DOCUMENTS PRESENT	
C		ALL LN MATCH USED LIST	
D		BOX CORRECTLY IDENTIFIED	
E			
Inspection Plan approved by: N. Baileau			Date: 2013 10 25

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2013 10 25	20 Pairs	OK	OK	OK	OK	OK	

Release certificates issue

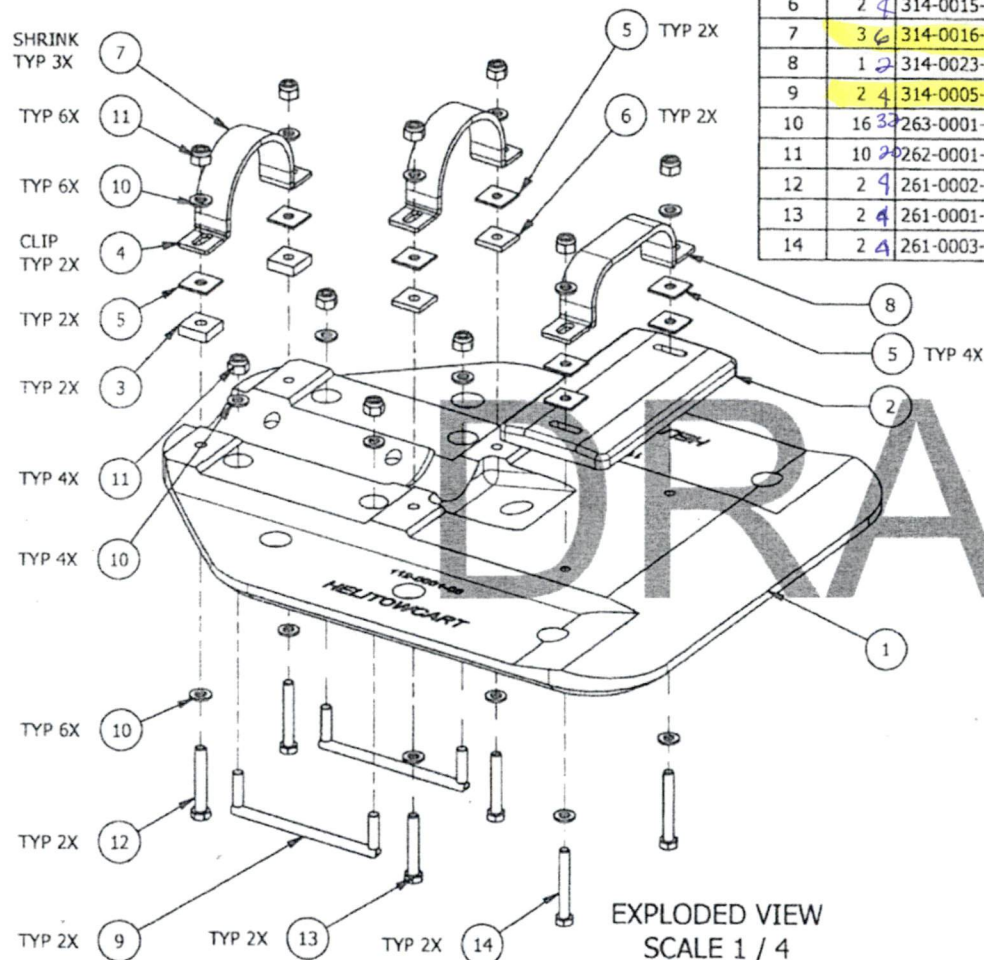
Release Certificates issued: yes no	By: N. Baileau	Date: 2013 11 11
Comments: HTT-LNF-131025-01 to 20		

V. Balan
2013 10 25

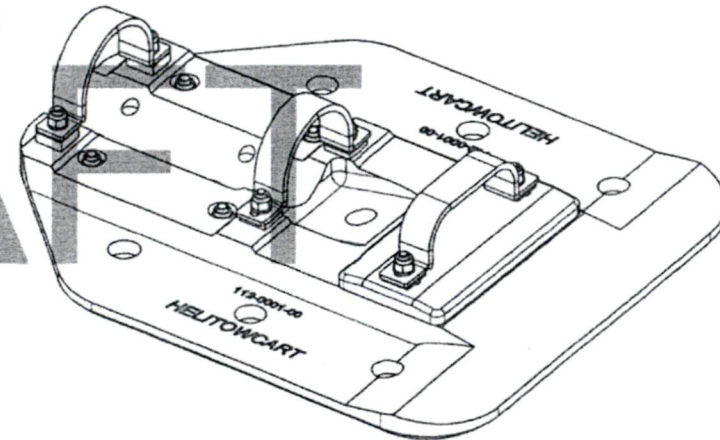
[illegible]

NOTES:

1. ICEBLADE ASSEMBLY CAN BE OMITTED FROM INSTALLATION (OPTIONAL)
2. FASTENERS LENGTH TO BE DETERMINED AT THE INSTALLATION



EXPLODED VIEW
SCALE 1 / 4



ASSEMBLED
SCALE 1 / 4

ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE
1	1	314-0001-01	BEARPAW - PAD	UHMW	---	1" THK.
2	1	314-0022-01	BEARPAW - FILLER BLOCK REAR	UHMW	---	1/2" THK.
3	2	314-0012-01	BEARPAW - FILLER BLOCK 1/4	UHMW	---	1/4" THK.
4	2	314-0006-15	BEARPAW - U SHAPED CLIP	SS304	ANNEALED	GAGE 12
5	8	314-0014-01	BEARPAW - FILLER BLOCK 1/16	UHMW	---	1/16" THK.
6	2	314-0015-01	BEARPAW - FILLER BLOCK 1/8	UHMW	---	1/8" THK.
7	3	314-0016-05	BEARPAW - SHRINK (FIT-221)	POLYOLEFIN	---	1" DIA X 5" LG.
8	1	314-0023-15	BEARPAW - LOW U SHAPED CLIP	SS304	ANNEALED	GAGE 12
9	2	314-0005-15	ICEBLADE ASSEMBLY	STEEL	---	---
10	16	263-0001-17	WASHER (AN960-416)	STEEL	---	1/4
11	10	262-0001-17	NYLON NUT (AN365-428A)	STEEL	---	1/4
12	2	261-0002-17	HEX BOLT (AN4-15A)	STEEL	QQ-P-416A	1/4-28
13	2	261-0001-17	HEX BOLT (AN4-14A)	STEEL	---	---
14	2	261-0003-17	HEX BOLT (AN4-16A)	STEEL	QQ-P-416A	1/4-28

REVISION				
REV	DESCRIPTION	REVISED BY	APPROVED	DATE
A	ISSUE FOR PRODUCTION	G.LAPOINTE	M. ZGELA	2006-04-25
B	MODIFY BOLT MODEL AND ADD FILLER BLOCK	G.LAPOINTE	M. ZGELA	2006-08-08
C	MODIFY BOLT MODEL AND ADD FILLER BLOCK AND SHRINK	G.LAPOINTE	M. ZGELA	2006-09-06
D	ADDITION OF STREAMLINE PAD CONFIGURATION	S.BERNIER	M. ZGELA	2009-10-22
E	ADDITION OF A REAR U SHAPED CLIP	S.BERNIER	M. ZGELA	2010-04-15
F	MODIFICATION OF LOW U SHAPED CLIP AND REAR FILLER BLOCK	R.B.R.	M. ZGELA	2013-08-09

THIS DRAWING IS PROPERTY OF HELIOWCART AND MAY NOT BE COPIED OR DISTRIBUTED WITHOUT AUTHORIZATION.	
DRAFTED BY: G. LAPOINTE	DATE: 2006/04/25
CHECKED BY:	DATE:
APPROVED TCCA BY: M. ZGELA	DATE: 2006/04/25
IF NOT SPECIFIED GENERAL TOLERANCE	
1/X ± 1/32 X/XX ± 0.010" X/XXX ± 0.005" ANG. ± 1°	
UNITS: INCH	SCALE: N/A

Helitowcart (Vanair inc.)
St-Nicolas, Lévis, Qc, Canada
www.helitowcart.com

DEFINITION:	BEARPAW ASSEMBLY	REV	F
DRAWING NUMBER:	112-0001-00	SHEET:	1 OF 1

T. & summary to TC

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
Pairs 9	112 0001 00 D	BP44 STREAMLINE BEARPAW ASSY	HTC-LNF-130203-01 HTC-LNF-yymmdd-seq
Includes:			
	SEE ATTACHED EXCEL SHEET	LN-	AUDIT TC 2013
	FOR DETAILED LIST OF COMPONENTS	LN-	
	& LOT NUMBERS	LN-	
		LN-	
		LN-	
		LN-	

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100 %	PRESENCE OF ICEBLADES & LARGE FILLER BLOCKS	
B		" " DOCUMENTS	
C		ALL LN MATCH USED PARTS	
D		ALL COMPONENTS PRESENT & IN CORRECT QTY	
E		BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: <i>N. Barbeau</i>			Date: 2013 02 03

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2013 02 03	9 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: <i>NATHALIE BARBEAU</i>	Date: 2013 02 03
Comments:		
HTC-LNF-130203 - (01) (02) (03) (04) (05) (06) (07) (08) (09)		

THIS KIT WAS ADDED TO ALL KITS IN STOCK ON OCT 22, 2013
LIST OF KITS: • HTC-RC-120518-01 (2) + (69) + (10)

October 22, 2013

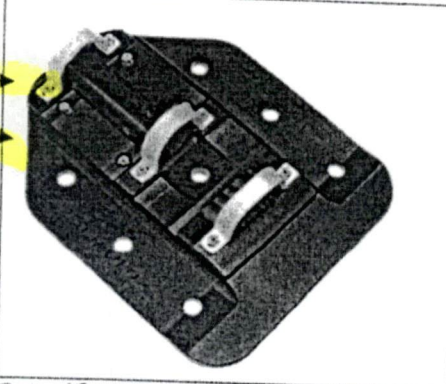
• HTC-RC-130203-01 (24) + (07) + (08) + (09)

Object: Shorter Bolts for tighter fit on Bearpaws for R44/R66

To whom concerned,

It has been brought to our attention that some cases call for shorter bolts to get the best fit in attaching the U-Clips to the skids. As mentioned in the installation instructions, the use of longer or shorter bolts may be adjusted as required (314-0011-00- Rev. D - p 3/14, Step 3).

We have thus included in this package, extra bolts to allow you to adapt installation to your preference. In most cases shorter bolts may be needed so the extra bolt package includes AN4-15A and AN4-14A:

Original bolts package contains:	Extra bolts package contains:	
Front tip: AN4-15A	Front tip: AN4-14A	
Center: AN4-16A	Center: AN4-15A	
No need to adapt the rear U clip.		<p>(Sgt: 162 = keep the same)</p>

EXTRA BOLTS SUPPLIED:

- 4 x AN4-14A
API LN 812721/22475
- 4 x AN4-15A
API LN 80136/4477

Should you have any question, do not hesitate to contact us.

Nathalie Barbeau

Nathalie Barbeau
VP Commercial Affairs,
Helitowcart (Vanair inc)

Letter_Previous_batches_Shorter_bolts_2013_10_22

INSTALLATION**BearPaw Installation**

Reference Documentation:

- [1] Robinson R44 - Maintenance Manual & Instruction for Continued Airworthiness. RTR460.
- [2] Annex A – BearPaw Assembly Drawings (112-0001-00-C & 112-0001-00-E)

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] to allow a clearance of the skid in the area of the aft cross tube of approximately 1 1/2" (38mm);
- Remove aft skid wearshoe & re-install the attaching screws.

Step 2: BearPaw Preparation

- With IceBlade Option: Install ice blades (Qty:2) under BearPaw pad as per drawing (112-0001-00) Ref [2];
- With IceBlade Option: Insert washer (Washer P/N 263-0001-17) through threaded part of the ice blade and secure with nut (P/N 262-0001-17);
- Position the BearPaw under skid at the aft intersection with the cross tube as per figure 1 with narrow edge pointing forward.

Step 3: BearPaw Set Up

- Insert washers (P/N 263-0001-17) through all four front bolts: 2x(P/N261-0002-17) & 2x(261-0003-17);
- Insert bolts(P/N261-0002-17) & (261-0003-17) and washer (P/N 263-0001-17) through BearPaw pad as per drawing (112-0001-00) Ref [2]
- If Streamline model, then apply step 3.1. See step 3.1 described below.
- Position the BearPaw pad under the skid
- Insert small filler blocks (P/N314-0012-01) & (P/N314-0014-01) at front of BearPaw & Insert filler blocks (P/N314-0015-01) at center of BearPaw as per drawing (112-0001-00) Ref [2];
- The use of filler blocks mentioned above may be increased, decreased, replaced or complemented by the use of washers (P/N 263-0001-17). Bolts (P/N261-0002-17) & (261-0003-17) may be replaced by longer or shorter AN4 bolts as required.
- Insert both U-shaped clips (P/N 314-0006-15) through bolts: 2x(P/N261-0002-17) & 2x(261-0003-17);
- Insert slotted clip supports (P/N 314-0007-15) through all four bolts. Position slotted clip supports with rounded edge toward helicopter skid;
- Insert washer (P/N 263-0001-17) & screw nuts (P/N 262-0001-17) for a tight fit. Max. torque on nuts 60 in.-lb.

Step 3.1: With the Streamline Version of the Bearpaw (P/N 112-0001-00-E)

- Insert washers (P/N 263-0001-17) through bolts (P/N261-0002-17)
- Insert bolts (P/N261-0002-17) and washer (P/N 263-0001-17) through the rear BearPaw pad as per drawing (112-0001-00-E) Ref [2]
- Insert rear filler block (P/N 314-0022-01) at the rear of BearPaw as per drawing (112-0001-00-E) Ref [2];
- Insert two washers (P/N 263-0001-17) per bolts (P/N261-0002-17) (four washers total)
- Insert Low U-shaped clip (P/N 314-0023-15) through bolts: (P/N261-0002-17) as per drawing (112-0001-00-E) Ref [2];
- Insert slotted clip supports (P/N 314-0007-15) through bolts. Position slotted clip supports with rounded edge toward helicopter skid;

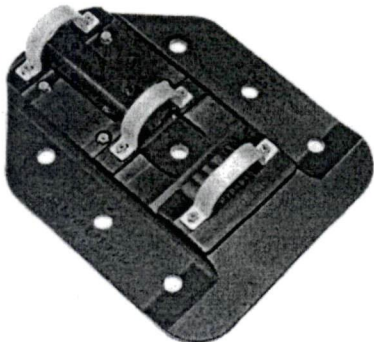
October 22, 2013

Object: Shorter Bolts for tighter fit on Bearpaws for R44/R66

To whom concerned,

It has been brought to our attention that some cases call for shorter bolts to get the best fit in attaching the U-Clips to the skids. As mentioned in the installation instructions, the use of longer or shorter bolts may be adjusted as required (314-0011-00- Rev. D - p 3/14, Step 3).

We have thus included in this package, extra bolts to allow you to adapt installation to your preference. In most cases shorter bolts may be needed so the extra bolt package includes AN4-15A and AN4-14A:

Original bolts package contains:	Extra bolts package contains:	
Front tip: AN4-15A	Front tip: AN4-14A	
Center: AN4-16A	Center: AN4-15A	
No need to adapt the rear U clip.		

Should you have any question, do not hesitate to contact us.

Nathalie Barbeau
Nathalie Barbeau
VP Commercial Affairs,
Helitowcart (Vanair inc)

Letter_Previous_batches_Shorter_bolts_2013_10_22

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
PAIRS 11	112 0001 00 D	BP44 STREAMLINE BEARPAW ASSY	HTC-LNF- 120518 - 01 HTC-LNF-yymmdd-seq
Includes:			
	SEE ATTACHED EXCEL SHEET		LN-
	FOR DETAILED LIST OF COMPONENTS		LN-
	& LOT NUMBERS		LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES & LARGE REAR FILLER BLOCKS	
B		" OF DOCUMENTS	
C		ALL LN MATCH USED PARTS	
D		ALL COMPONENTS PRESENT & IN CORRECT QTY	
E		BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: <u>N. Barbeau</u>			Date: 2012 06 06

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2012 06 06	11 PAIRS	OK	OK	OK	OK	OK	

Release certificates issue

Release Certificates issued: <u>yes</u> no	By: <u>NATHANIE BARBEAU</u>	Date: <u>2012 06 06</u>
Comments:		
HTC-LNF-120518-01 -06 -11 -02 -07 -03 -08 -04 -09 -05 -10		

THIS KIT WAS ADDED TO ALL KITS IN STOCK ON OCT 22, 2013
LIST OF KITS: • HTC-RC-120518-01 (02) + (09) + (10)

October 22, 2013


• HTC-RC-130203-01 (04) + (07) + (08) + (09)

Object: Shorter Bolts for tighter fit on Bearpaws for R44/R66

To whom concerned,

It has been brought to our attention that some cases call for shorter bolts to get the best fit in attaching the U-Clips to the skids. As mentioned in the installation instructions, the use of longer or shorter bolts may be adjusted as required (314-0011-00- Rev. D - p 3/14, Step 3).

We have thus included in this package, extra bolts to allow you to adapt installation to your preference. In most cases shorter bolts may be needed so the extra bolt package includes AN4-15A and AN4-14A:

Original bolts package contains:	Extra bolts package contains:	
Front tip: AN4-15A	Front tip: AN4-14A	
Center: AN4-16A	Center: AN4-15A	
No need to adapt the rear U clip.	(Left: stays the same 16A)	

EXTRA BOLTS SUPPLIED:

- 1 x AN4-14A
API LN 812721/22475
- 4 x AN4-15A
API LN 80136/4477

Should you have any question, do not hesitate to contact us.

Nathalie Barbeau

Nathalie Barbeau
VP Commercial Affairs,
Helitowcart (Vanair inc)

Letter_Previous_batches_Shorter_bolts_2013_10_22

INSTALLATION

BearPaw Installation

Reference Documentation:

- [1] Robinson R44 - Maintenance Manual & Instruction for Continued Airworthiness. RTR460.
- [2] Annex A – BearPaw Assembly Drawings (112-0001-00-C & 112-0001-00-E)

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] to allow a clearance of the skid in the area of the aft cross tube of approximately 1 ½" (38mm);
- Remove aft skid wearshoe & re-install the attaching screws.

Step 2: BearPaw Preparation

- With IceBlade Option: Install ice blades (Qty:2) under BearPaw pad as per drawing (112-0001-00) Ref [2];
- With IceBlade Option: Insert washer (Washer P/N 263-0001-17) through threaded part of the ice blade and secure with nut (P/N 262-0001-17);
- Position the BearPaw under skid at the aft intersection with the cross tube as per figure 1 with narrow edge pointing forward.

Step 3: BearPaw Set Up

- Insert washers (P/N 263-0001-17) through all four front bolts: 2x(P/N261-0002-17) & 2x(261-0003-17);
- Insert bolts(P/N261-0002-17) & (261-0003-17) and washer (P/N 263-0001-17) through BearPaw pad as per drawing (112-0001-00) Ref [2]
- If Streamline model, then apply step 3.1. See step 3.1described below.
- Position the BearPaw pad under the skid
- Insert small filler blocks (P/N314-0012-01) & (P/N314-0014-01) at front of BearPaw& Insert filler blocks (P/N314-0015-01) at center of BearPaw as per drawing (112-0001-00) Ref [2];
- The use of filler blocks mentioned above may be increased, decreased, replaced or complemented by the use of washers (P/N 263-0001-17). Bolts (P/N261-0002-17) & (261-0003-17) may be replaced by longer or shorter AN4 bolts as required.
- Insert both U-shaped clips (P/N 314-0006-15) through bolts: 2x(P/N261-0002-17) & 2x(261-0003-17);
- Insert slotted clip supports (P/N 314-0007-15) through all four bolts. Position slotted clip supports with rounded edge toward helicopter skid;
- Insert washer (P/N 263-0001-17) & screw nuts (P/N 262-0001-17) for a tight fit. Max. torque on nuts 60 in.-lb.

Step 3.1: With the Streamline Version of the Bearpaw (P/N 112-0001-00-E)

- Insert washers (P/N 263-0001-17) through bolts (P/N261-0002-17)
- Insert bolts (P/N261-0002-17) and washer (P/N 263-0001-17) through the rear BearPaw pad as per drawing (112-0001-00-E) Ref [2]
- Insert rear filler block (P/N 314-0022-01) at the rear of BearPaw as per drawing (112-0001-00-E) Ref [2];
- Insert two washers (P/N 263-0001-17) per bolts (P/N261-0002-17) (four washers total)
- Insert Low U-shaped clip (P/N 314-0023-15) through bolts: (P/N261-0002-17) as per drawing (112-0001-00-E) Ref [2];
- Insert slotted clip supports (P/N 314-0007-15) through bolts. Position slotted clip supports with rounded edge toward helicopter skid;

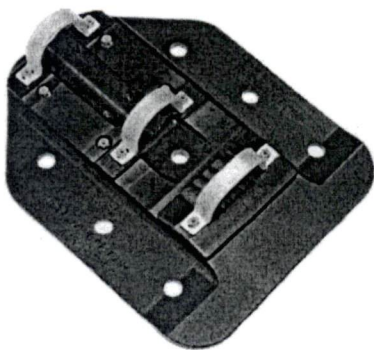
October 22, 2013

Object: Shorter Bolts for tighter fit on Bearpaws for R44/R66

To whom concerned,

It has been brought to our attention that some cases call for shorter bolts to get the best fit in attaching the U-Clips to the skids. As mentioned in the installation instructions, the use of longer or shorter bolts may be adjusted as required (314-0011-00- Rev. D - p 3/14, Step 3).

We have thus included in this package, extra bolts to allow you to adapt installation to your preference. In most cases shorter bolts may be needed so the extra bolt package includes AN4-15A and AN4-14A:

Original bolts package contains:	Extra bolts package contains:	
Front tip: AN4-15A	Front tip: AN4-14A	
Center: AN4-16A	Center: AN4-15A	
No need to adapt the rear U clip.		

Should you have any question, do not hesitate to contact us.

Nathalie Barbeau
Nathalie Barbeau
VP Commercial Affairs,
Helitowcart (Vanair inc)

Letter_Previous_batches_Shorter_bolts_2013_10_22

[illegible]

Traceability data

Qty	Part No.	Desc:	Lot number
10 PAIRS	1120001 00D	BP44 STREAMLINE BEAKPAW ASSY	HTC-LNF-110920-01 HTC-LNF-yymmdd-seq
Includes:			
	SEE ATTACHED EXCEL SHEET		LN-
	FOR DETAILED LIST OF COMPONENTS		LN-
	& LOT NUMBERS		LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES &	LARGE FILLER BLOCKS
B		PRESENCE OF DOCUMENTS	
C		ALL LN MATCH USED PARTS	
D		ALL COMPONENTS PRESENT & IN CORRECT QTY	
E		Box APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: N. Barbeau			Date: 2011 09 20

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2011 09 20	10 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: NATHALIE BARBEAU	Date: 2011 09 20
Comments:		
HTC-LNF-110920-01 - 06 - 02 - 07 - 03 - 08 - 04 - 09 - 05 - 10*		

→ Re-inspected & issued new
FORM-1 AFTER USE FOR
FLIGHT TESTS FOR R66
SEE ATTACHED RE-INSPECTION
RECORDS. DB 2013 11 11

Brought Back From AirPort
Re-inspected Again 2014 01 07 (Pair had been Brought Back)
 From AirPort By LB
 (For MR. MARTINELLI / ITALY)

HTC-RHTC-RHTC-RC-110920-01																				
HTC-LNF-110920-01											P/N	Qté par paire	Nb paires req	Qté totale pièces	Lot 1	Qty	Lot 2	Qty		
1	2	3	4	5	6	7	8	9	10											
Rear filler block assy																				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bp pads STREAMLINE	314 0001 01 B	2	10	20	LN110329-01	20				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Filler block REAR	314 0022 01 A	2	10	20	LN-110324-02	20				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bolts AN4-15A	261 0002 17 A	4	10	40	Aircraft Spruce AN4-15A lot 76013/38605-80196/4471	40	4x			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	8	10	80	Aircraft Spruce AN960-416 Lot 73384/V3912	80				
L1	L1	L2	L2	L2	L2	L2	L2	L2	L2	Nuts	262 0001 17 A	4	10	40	Aircraft Spruce MS21044N4 / AN365-428A Lot no:	8	Aviall MS21044N4, Lot 74879/719464 mfg: Abbott, PO1507777		32	
Iceblade Assy													10							
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Iceblade Assy	314 0002 15 A	4	10	40	LN110323-05	40				
L1	L1	L2	L2	L2	L2	L2	L2	L2	L2	Nuts	262 0001 17 A	8	10	80	Aircraft Spruce MS21044N4 AN365-428A Lot	16	Aviall MS21044N4, Lot 74879/719464 mfg: Abbott, PO1507777		64	
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	8	10	80	Aircraft Spruce AN960-416 Lot 74431/V7588	80				
Bags with parts for customer assy of Front U-clips													10							
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	U-shaped Clips	314 0006 15 B	4	10	40	LN110323-01					
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Slotted clip Supports	314 0007 15 B	8	10	80	LN110323-04	80				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bolts AN4-16A	261 0003 17 A	4	10	40	Aircraft Spruce AN4-16A lot 40-15556 58052/31582	40	4x			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bolts AN4-15A	261 0002 17 A	4	10	40	Aircraft Spruce AN4-15A lot 40-15810 4015810	40	4x			
L1	L1	L1	L1	L2	L1	L1	L1	L1	L2	Nuts	262 0001 17 A	8	10	80	Aircraft Spruce MS21044N4 AN365-428A lot 73831/719009	64	Aviall MS21044N4, Lot 74879/719464 mfg: Abbott, PO1507777		16	
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	16	10	160	Aircraft Spruce AN960-416 Lot 74431/V7588	160				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Filler blocks 1/4"	314 0012 02 A	4	10	40	Gr Polyfab LN-110628-01	40				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L2	Filler blocks 1/8"	314 0015 01 A	4	10	40	Gr Polyfab LN-110323-07	32	Gr Polyfab LN-110522-02		8	
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Filler blocks 3/32"	314 0014 01 A	4	10	40	Gr Polyfab LN-110522-03	40				
Bags with parts for customer assy of LOW REAR U-Clips													10							
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	LOW U-shaped clips	314 0023 15 A	2	10	20	LN-110323-02	20				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Slotted clip Supports	314 0007 15 B	4	10	40	LN110323-04	40				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	8	10	80	Aircraft Spruce AN960-416 lot 73384/V4700	80				

J. Barlean
 20 Sept 2011

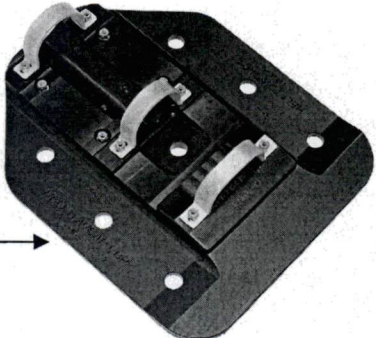
January 7, 2014

Object: Shorter Bolts for tighter fit on Bearpaws for R44/R66

To whom concerned,

It has been brought to our attention that some cases call for slightly longer or shorter bolts to get the best fit in attaching the U-Clips to the skids. As mentioned in the installation instructions, the use of longer or shorter bolts may be adjusted as required (314-0011-00- Rev. D - p 3/14, Step 3).

We have thus included in this package, extra bolts to allow you to adapt installation to your preference. In most cases shorter bolts may be needed so the extra bolt package includes AN4-14A:

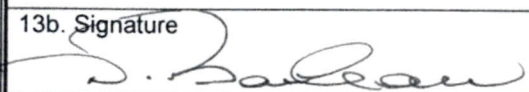
Original bolts package contains:		Suggested installation: (Additional parts supplied)	
Front tip:	AN4-16A	Front tip: AN4-15A	
Center:	AN4-15A	Center: AN4-14A & Add Filler block as needed	
Aft:	AN4-15A	Aft: AN4-16A	

Should you have any question, do not hesitate to contact us.



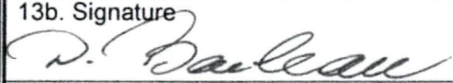
Nathalie Barbeau
VP Commercial Affairs,
Helitowcart (Vanair inc)

Letter_Previous_batches_Shorter_bolts_2014_01_07_(3rdVers)

1. Approving National Aviation Authority / Country Transport Canada			2. Authorized Release Certificate Form One		3. Form Tracking No. HTC-RC110920-10
4. Approved Organization Name & Address: Helitowcart (Vanair inc.) 860, St-Nicolas, Levis, Quebec, Canada G7A 5K6			5. Work Order/Contract/Invoice F4810 Giovanni Martinelli, Milan, Italy		
6. Item	7. Description	8. Part no.	9. Qty	10. Serial / Lot no.	11. Status / work
1	Helitowcart - BP44 BearPaw	HTC-MDL-BP-44-1000 112-0001-00	2	HTC-LNF-110920-01	New
12. Remarks Canada: Transport Canada Approved manufacturer no 27-06, Transport Canada STC no. SH06-24 United States: FAA STC no. SR02432NY					
13a. Certifies that the items identified above were manufactured in conformity to:		<input checked="" type="radio"/> Approved design data and are in condition for safe operation <input type="radio"/> Non approved design data specified in block 12.		14a. Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 has been performed in compliance with the Canadian Aviation Regulations <input type="radio"/> CAR 571.10 Maintenance release. <input type="radio"/> Other regulation specified in block 12.	
13b. Signature 		13c. Approved Organization. Number Inspector no: 001 / STC no SH06-24 Approved manufacturer no 27-06		14b. Signature	
13d. Name Nathalie Barbeau, Quality Manager		13e. Date (dd/mm/yyyy) 07/01/2014		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mm/yyyy)	

Ref: Transport Canada: Form One

- 1- This document does not constitute authority to install the part.
- 2- Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.
- 3- Statements 13a & 14a do not constitute installation certification. In all cases the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown

1. Approving National Aviation Authority / Country Transport Canada			2. Authorized Release Certificate Form One		3. Form Tracking No. HTC-RC-11092010
4. Approved Organization Name & Address: Helitowcart (Vanair inc.) 877A Alphonse-Desrochers, St-Nicolas, Levis, Quebec, Canada G7A 5K6			5. Work Order/Contract/Invoice 4734 Carol Lagace, Esq.		
6. Item	7. Description	8. Part no.	9. Qty	10. Serial / Lot no.	11. Status / work
1	Helitowcart - BP44 BearPaw For Robinson 44	HTC-MDL-BP-44-1000 112-0001-00	2	HTC-LNF-11092-01	New
2	Helitowcart - BP350 BearPaw For Astar 350/355	HTC-MDL-BP350/355-1000_A 112-0002-00	2	HTC-LNF-_____	New
3	Helitowcart - BP130 BearPaw For Eurocopter EC130	HTC-MDL-BP-EC130-1000_A 112-0005-00	2	HTC-LNF-_____	New
12. Remarks Canada: Transport Canada Approved manufacturer no 27-06, Transport Canada STC no. SH06-24 United States: FAA STC no. SR02432NY					
13a. Certifies that the items identified above were manufactured in conformity to:		<input checked="" type="radio"/> Approved design data and are in condition for safe operation <input type="radio"/> Non approved design data specified in block 12.		14a. Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 has been performed in compliance with the Canadian Aviation Regulations <input type="radio"/> CAR 571.10 Maintenance release. <input type="radio"/> Other regulation specified in block 12.	
13b. Signature 		13c. Approved Organization. Number		14b. Signature	
13d. Name		13e. Date (dd/mm/yyyy)		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mm/yyyy)	

Ref: Transport Canada: Form One

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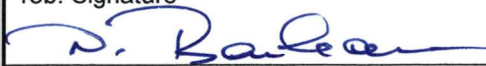
(Project BP Pour R66)

PAIRE UTILISÉE POUR ANALYSES PAR AIA TECH & ENSUITE
POUR LES TESTS EN VOL. PAIRE RÉ-INSPECTÉE À 100%.
MANQUAIT BOULONS AU RETOUR POUR INSPECTION. REMPLACÉS.
VOIR NOUV. NO. LOTS.

Nathalie Barbeau
2013 10 24

HTC-RHTC-RHTC-RC-110920-01																			
HTC-LNF-110920-01										P/N	Qté par paire	Nb paires req	Qté totale pièces	Lot 1	Qty	Lot 2	Qty		
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bp pads STREAMLINE	314 0001 01 B	2	10	20	LN110329-01	20			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Filler block REAR	314 0022 01 A	2	10	20	LN-110324-02	20			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bolts AN4-15A	261 0002 17 A	4	10	40	Aircraft Spruce AN4-15A lot 76013/38605	40	80196/4477	4x	
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	8	10	80	Aircraft Spruce AN960-416 Lot 73384/V3912	80			
L1	L1	L2	L2	L2	L2	L2	L2	L2	L2	Nuts	262 0001 17 A	4	10	40	Aircraft Spruce MS21044N4 / AN365-428A Lot no:	8	Aviall MS21044N4, Lot 74879/719464 mfg: Abbott, PO1507777	32	
Iceblade Assy													10						
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Iceblade Assy	314 0002 15 A	4	10	40	LN110323-05	40			
L1	L1	L2	L2	L2	L2	L2	L2	L2	L2	Nuts	262 0001 17 A	8	10	80	Aircraft Spruce MS21044N4 AN365-428A Lot	16	Aviall MS21044N4, Lot 74879/719464 mfg: Abbott, PO1507777	64	
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	8	10	80	Aircraft Spruce AN960-416 Lot 74431/V7588	80			
Bags with parts for customer assy of Front U-clips													10						
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	U-shaped Clips	314 0006 15 B	4	10	40	LN110323-01				
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Slotted clip Supports	314 0007 15 B	8	10	80	LN110323-04	80			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bolts AN4-16A	261 0003 17 A	4	10	40	Aircraft Spruce AN4-16A lot 40-15556	40	58052/31582	4x	
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bolts AN4-15A	261 0002 17 A	4	10	40	Aircraft Spruce AN4-15A lot 40-15840	40	81271/22975	4x	
L1	L1	L1	L1	L2	L1	L1	L1	L1	L1	nuts	262 0001 17 A	8	10	80	Aircraft Spruce MS21044N4 AN365-428A lot 73831/719009	64	Aviall MS21044N4, Lot 74879/719464 mfg: Abbott, PO1507777	16	
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	16	10	160	Aircraft Spruce AN960-416 Lot 74431/V7588	160			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Filler blocks 1/4"	314 0012 02 A	4	10	40	Gr Polyfab LN-110628-01	40			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L2	Filler blocks 1/8"	314 0015 01 A	4	10	40	Gr Polyfab LN-110323-07	32	Gr Polyfab LN-110522-02	8	
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Filler blocks 3/32"	314 0014 01 A	4	10	40	Gr Polyfab LN-110522-03	40			
Bags with parts for customer assy of LOW REAR U-Clips													10						
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	LOW U-shaped clips	314 0023 15 A	2	10	20	LN-110323-02	20			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Slotted clip Supports	314 0007 15 B	4	10	40	LN110323-04	40			
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	8	10	80	Aircraft Spruce AN960-416 lot 73384/V4700	80			

N. Barbeau
20 sept 2011

1. Approving National Aviation Authority / Country Transport Canada			2. Authorized Release Certificate Form One		3. Form Tracking No. HTC-RC-110920-10
4. Approved Organization Name & Address: Helitowcart (Vanair inc.) 877A Alphonse-Desrochers, St-Nicolas, Levis, Quebec, Canada G7A 5K6			5. Work Order/Contract/Invoice		
6. Item	7. Description	8. Part no.	9. Qty	10. Serial / Lot no.	11. Status / work
1	Helitowcart - BP44 BearPaw For Robinson 44	HTC-MDL-BP-44-1000 112-0001-00	2	HTC-LNF-110920-01	New
2	Helitowcart - BP350 BearPaw For Astar 350/355	HTC-MDL-BP350/355-1000_A 112-0002-00	2	HTC-LNF-110920-01	New
<p>PREPARED BY DEV'T 2/12/20 PP 66 TESTS</p>					
12. Remarks Canada: Transport Canada Approved manufacturer no 27-06, Transport Canada STC no. SR06-24 United States: FAA STC no. SR02432NY					
13a. Certifies that the items identified above were manufactured in conformity to:		<input checked="" type="radio"/> Approved design data and are in condition for safe operation <input type="radio"/> Non approved design data specified in block 12.		14a. Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 has been performed in compliance with the Canadian Aviation Regulations <input type="radio"/> CAR 571.10 Maintenance release. <input type="radio"/> Other regulation specified in block 12.	
13b. Signature 		13c. Approved Organization. Number		14b. Signature	
13d. Name		13e. Date (dd/mm/yyyy)		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mm/yyyy)	

Ref: Transport Canada: Form One

- 1- This document does not constitute authority to install the part.
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PAIRE EN QUARANTAINE

PRÊTÉE À LB
Pour TESTS DEV'PT
BPG6

* À RÉINSPECTER
AVANT DE REMETTRE
EN CIRCULATION

2013 05 31

→ PAIRE ENVOYÉE À
MIRKO ZGELA POUR
PROJET BP44

→ PRÊTÉE À MIRKO
Doit revenir.

DR

INSTALLATION

BearPaw Installation

Reference Documentation:

- [1] Robinson R44 - Maintenance Manual & Instruction for Continued Airworthiness. RTR460.
- [2] Annex A – BearPaw Assembly Drawings (112-0001-00-C & 112-0001-00-E)

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] to allow a clearance of the skid in the area of the aft cross tube of approximately 1 ½" (38mm);
- Remove aft skid wearshoe & re-install the attaching screws.

Step 2: BearPaw Preparation

- With IceBlade Option: Install ice blades (Qty:2) under BearPaw pad as per drawing (112-0001-00) Ref [2];
- With IceBlade Option: Insert washer (Washer P/N 263-0001-17) through threaded part of the ice blade and secure with nut (P/N 262-0001-17);
- Position the BearPaw under skid at the aft intersection with the cross tube as per figure 1 with narrow edge pointing forward.

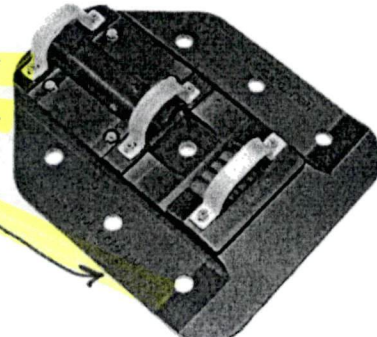
Step 3: BearPaw Set Up

- Insert washers (P/N 263-0001-17) through all four front bolts: 2x(P/N261-0002-17) & 2x(261-0003-17);
- Insert bolts(P/N261-0002-17) & (261-0003-17) and washer (P/N 263-0001-17) through BearPaw pad as per drawing (112-0001-00) Ref [2]
- If Streamline model, then apply step 3.1. See step 3.1described below.
- Position the BearPaw pad under the skid
- Insert small filler blocks (P/N314-0012-01) & (P/N314-0014-01) at front of BearPaw& Insert filler blocks (P/N314-0015-01) at center of BearPaw as per drawing (112-0001-00) Ref [2];
- The use of filler blocks mentioned above may be increased, decreased, replaced or complemented by the use of washers (P/N 263-0001-17). Bolts (P/N261-0002-17) & (261-0003-17) may be replaced by longer or shorter AN4 bolts as required.

It has been brought to our attention that some cases call for shorter bolts to get the best fit in attaching the U-Clips to the skids. As mentioned in the installation instructions, the use of longer or shorter bolts may be adjusted as required (314-0011-00- Rev. D - p 3/14, Step 3).

We have thus included in this package, extra bolts to allow you to adapt installation to your preference. In most cases shorter bolts may be needed so the extra bolt package includes AN4-15A and AN4-14A:

Original bolts package contains:		Extra bolts package contains:	
Front tip:	AN4-15A	Front tip:	AN4-14A
Center:	AN4-16A	Center:	AN4-15A
No need to adapt the rear U clip.			



Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
4 PAIRS	112 0001 00D	BPAA STREAMLINE BEARPAW ASSY	HTC-LNF-110417-01 HTC-LNF-yymmdd-seq
Includes:			
	SEE ATTACHED EXCEL SHEET		LN-
	FOR DETAILED LIST		LN-
	OF COMPONENTS & LOT NUMBERS		LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES & FILLER BLOCKS	
B	100%	PRESENCE OF DOCUMENTS	
C	100%	ALL LN MATCH WITH USED PARTS	
D	100%	ALL COMPONENTS PRESENT & IN CORRECT QTY	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: D. Barbeau			Date: 2011 04 17

Inspection Records

Ok = I+initials

Date:	Quantity	A	B	C	D	E	Notes
2011 04 17	4 PAIRS	OK MB	OK MB	OK WB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: D. Barbeau	Date: 2011 04 17
Comments:		
- iceblades & filler block included but not installed.		
HTC-LNF-110417-01		
-02		
-03		
-04		

HTC-RC-110417-01														
				HTC-LNF-110417-01	P/N	Qté par paire	Nb paires req	Qté totale pièces	Lot 1	Qty	Lot 2	Qty	Lot 3	Qty
Rear filler block assy														
L1	L1	L1	L1	Bp pads STREAMLINE	314 0001 01 B	2	4	8	LN110324-01	8				
L1	L1	L1	L1	Filler block REAR	314 0022 01 A	2	4	8	LN-110324-02	8				
L1	L1	L1	L1	Bolts AN4-15A	261 0002 17 A	4	4	16	Aircraft Spruce AN4-15A lot 74412/14420	16				
L1	L1	L1	L1	Nuts	262 0001 17 A	4	4	16	Aircraft Spruce MS21044N4 / AN365-428A Lot no: 73831/718601	16				
L1	L1	L1	L1	Washers	263 0001 17 A	8	4	32	Aircraft Spruce AN960-416 Lot 73384/V3912	32				
Iceblade Assy							4							
L1	L1	L1	L1	Iceblade Assy	314 0002 15 A	4	4	16	LN100316-01	16				
L1	L1	L1	L1	Nuts	262 0001 17 A	8	4	32	Aircraft Spruce MS21044N4 AN365-428A Lot 73831/718601	32				
L1	L1	L1	L1	Washers	263 0001 17 A	8	4	32	Aircraft Spruce AN960-416 Lot 73384/V3912	32				
Bags with parts for customer assy of Front U-clips							4							
L1	L1	L1	L1	U-shaped Clips	314 0006 15 B	4	4	16	LN081202-03 ***Added filler blocks see bottom of this chart					
L1	L1	L1	L1	Slotted clip Supports	314 0007 15 B	8	4	32	LN110323-04	32				
L1	L1	L1	L1	Bolts AN4-16A	261 0003 17 A	4	4	16	Aircraft Spruce AN4-16A lot 40-15556	16				
L1	L1	L1	L1	Bolts AN4-15A	261 0002 17 A	4	4	16	Aircraft Spruce AN4-15A lot 74412/14420	16				
L1	L1	L1	L1	nuts	262 0001 17 A	8	4	32	Aircraft Spruce MS21044N4 AN365-428A lot 73831/718601	32				
L1	L1	L1	L1	Washers	263 0001 17 A	16	4	64	Aircraft Spruce AN960-416 lot 83384/V3912	64				
L1	L1	L1	L1	Filler blocks 1/4"	314 0012 02 A	4	4	16	Gr Polyfab LN-110323-06	16				
L1	L1	L1	L1	Filler blocks 1/8"	314 0015 01 A	4	4	16	Gr Polyfab LN-110323-07	16				
L1	L1	L1	L1	Filler blocks 3/32"	314 0014 01 A	4	4	16	Gr Polyfab LN-110215-01	16				
Bags with pasrts for customer assy of LOW REAR U-Clips							4							
L1	L1	L1	L1	LOW U-shaped clips	314 0023 15 A	2	4	8	LN-110323-02	8				
L1	L1	L1	L1	Bolts AN4-15A	261 0002 17 A	4	4	16	Aircraft Spruce AN4-15A lot 74412/14420	16				
L1	L1	L1	L1	Slotted clip Supports	314 0007 15 B	4	4	16	LN110323-04	16				
L1	L1	L1	L1	Washers	263 0001 17 A	8	4	32	Aircraft Spruce AN960-416 lot 73384/V3912	32				
									***Added filler blocks for U-clips bent slightly off and accepted by derogation / NCR 2010-03-17-nb-01 & ASS 2010-03-17-01					
L1	L1	L1	L1	Filler blocks 1/8"	314 0015 01 A	4	4	16	Gr Polyfab LN-110323-07	16				
L1	L1	L1	L1	Filler blocks 3/32"	314 0014 01 A	8	4	32	Gr Polyfab LN-110215-01	32				
na	na	na	na	Washers	263 0001 17 A									

J. R. R. R.
2011 04 17

March 17th, 2010

Object : BearPaws BP44 – Tightness Adjustment

To whom concerned

It has been brought to our attention that some bearpaw assemblies were not tight enough when all components were installed as prescribed in the instruction.

Following our internal inquiry into the matter, we have discovered that some U-shaped clips have been bent to a dimension that is slightly off, thus resulting in a higher U-shaped dimension.

In order to obtain the desired tightness, we have included in this package thinner Filler blocks and have indicated in the chart below suggested combinations of Filler blocks.

For your information, the Installation instruction indicates on page 3/14 at Step 3 "BearPaw Set Up" that you may replace Filler blocks with washers as well if this is more convenient to you.

Suggestion for Filler block combination:

Actual :	Replace by :
Front 1 x Filler Block 3/32" (2.38mm) 1 x Filler Block 1/4" (6.27mm)	Front 2 x Filler Blocks 3/32" (each 2.38mm) Or 1 x Filler Block 1/8" (3.175mm)
Rear 1x Filler Block 1/8" (3.175mm)	Rear: 1 x Filler Block 3/32" (2.38mm) Or Install no filler block

We invite you to contact us should you require further information.

Kind Regards,



Nathalie Barbeau
Quality Assurance Director
Helitowcart

8 x 3/32" filler block
4 x 1/8"

Traceability data

Qty	Part No.	Desc:	Lot number
4 PAIRS	112 0001 00D	BP44 STREAMLINE BEARPAW ASS'y	HTC-LNF- 110416-01 HTC-LNF-yymmdd-seq
Includes:			
	See attached excel chart		LN-
	for detailed list		LN-
	of components & lot numbers		LN-
	/NB		LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES & FILLER BLOCKS	
B	100%	PRESENCE OF DOCUMENTS	
C	100%	ALL LN FOR BATCH MATCH USED PARTS	
D	100%	ALL COMPONENTS PRESENT d'n CORRECT QTY	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by:			Date:

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2011 04 16	4 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: D. Barthelemy	Date: 2011.04.16 PB
Comments:		
ice blades & Rear filler block included but not installed.		
HTC-LNF-110416-01		
-02		
-03		
-04		
-05		
-06		



March 17th, 2010

Object : BearPaws BP44 – Tightness Adjustment

To whom concerned

It has been brought to our attention that some bearpaw assemblies were not tight enough when all components were installed as prescribed in the instruction.

Following our internal inquiry into the matter, we have discovered that some U-shaped clips have been bent to a dimension that is slightly off, thus resulting in a higher U-shaped dimension.

In order to obtain the desired tightness, we have included in this package thinner Filler blocks and have indicated in the chart below suggested combinations of Filler blocks.

For your information, the Installation instruction indicates on page 3/14 at Step 3 "BearPaw Set Up" that you may replace Filler blocks with washers as well if this is more convenient to you.

Suggestion for Filler block combination:

Actual :	Replace by :
Front 1 x Filler Block 3/32" (2.38mm) 1 x Filler Block 1/4" (6.27mm)	Front 2 x Filler Blocks 3/32" (each 2.38mm) Or 1 x Filler Block 1/8" (3.175mm)
Rear 1x Filler Block 1/8" (3.175mm)	Rear: 1 x Filler Block 3/32" (2.38mm) Or Install no filler block

We invite you to contact us should you require further information.

Kind Regards,

Nathalie Barbeau
Quality Assurance Director
Helitowcart

8 x 3/32" filler blocks
4 x 1/8"

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
19 PAIRS	112 0001 00D	BP44 STREAMLINE BEARPAW ASS'Y	HTC-LNF- 091210-01 HTC-LNF-yymmdd-seq
Includes:			
	See attached excel chart for detailed list of components + lot numbers NB		LN-
			LN-
			LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100 %	PRESENCE OF ICEBLADES & FILER BLOCK.	
B	100 %	PRESENCE OF DOG EYENTS	
C	100 %	ALL LN FOR BATCH MATCH USED PARTS	
D	100 %	ALL COMPONENTS PRESENT & IN CORRECT QTY	
E	100 %	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by:			Date:

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2009 12 10	19 PAIRS	OK MB	OK MB	OK MB	OK MB	OK MB	
2010 05 03	19 PAIRS	ADDED REAR LOW U-CLIP ON ALL PAIRS SEE ATTACHED RECORDS AS PER ECO #6 / SENT KIT TO CUSTOMERS WHERE APPLICABLE.					

Release certificates issue

Release Certificates issued: yes no	By: J. Dorian	Date: 09 12 10
Comments:		
<ul style="list-style-type: none"> RELEASE CERTIF. NOS: HTC-RC-091210-01 TO 19 2010 0503 / REL. CERTIF VERSION "b" ISSUED FOR UNIT NO 01, 02, 03, 04, 06 THAT WERE ALREADY ON TERRAIN. SENT WITH OPTIONAL 3RD U-CLIP FOR REAR KIT. / NB / SEE ECO #6. 		

HTC-RC-091210-xx(b)																																														
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	HTC-LNF-091210-01	Qté par paire	Nb paires req	Qté totale pièces	Lot 1	Qty	Info	Lot2	Qty	Info	Lot3	Qty tot																
Rear filler block assy																																														
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Bp pads STREAMLINE	314 0001 01 B	2	19	38	LN-091209-01	38						38															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Filler block REAR	314-0022-01 A	2	19	38	LN-091209-02	38						38															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Bolts AN4-13A	261 0004 17 A	4	19	76	L\N 66213/37961 4500089804	76						76															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Nuts	262 0001 17 A	4	19	76	API/4500068971 / L/N68222/716444	76						76															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Washers	263 0001 17 A	8	19	152	NAS1149F0463P/L/N 71070/U2947	152						152															
Iceblade Assy:																																														
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Iceblade assy	314 0002 15 A	4	19	76	L/N 090603-01	76						76															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Nuts	262 0001 17 A	8	19	152	API/4500068971 / L/N68222/716444	152						152															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Washers	263 0001 17 A	8	19	152	NAS1149F0463P/L/N 71070/U2947	152						152															
Bags with parts for customer assy of Front U-Clips:																																														
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	U-Shaped Clips	314 0006 15 B	4	19	76	L/N-081202	76						76															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Slotted clip Supports	314 0007 15 B	8	19	152	L/N081201-06 / Batch 5	152						152															
√	√	√	√	√	√	√	√	√	√	√	√	√	L2	L2	L2	L2	L2	L2	Bolts AN4-16A	261 0003 17 A	4	19	76	API 4500006984 /L/N 58052/31582	48	API45000068519 / L/N66410/6472	28			76																
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Bolts AN4-15A	261 0002 17 A	4	19	76	L/N10357// M&m //4500033156	76						76															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	L2	Nuts	262 0001 17 A	8	19	152	API/4500068971 / L/N68222/716444	148	API 68222/71644 -MS2144N4/45000	4			152																
√	√	√	√	√	√	√	√	√	√	√	√	L2	L2	L2	L2	L2	L2	L2	Washers	263 0001 17 A	16	19	304	NAS1149F0463P/L/N 71070/U2947	160	NAS1149F0463P Lot71070/U2947	144			304																
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Filler blocks 1/4"	314 0012 02 A	4	19	76	L/N091208-01	76						76															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Filler blocks 1/8"	314 0015 01 A	4	19	76	L/N090219-01	76						76															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Filler blocks 3/32"	314 0014 01 A	4	19	76	L/N090219-02	76						76															
Bags with parts for customer assy of LOW REAR U-Clips:																																														
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	LOW U-Shaped Clips	314 0023 15 A	2	19	38	LN-100430-01	38						38															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Bolts AN4-15A	261 0002 17 A	4	19	76	L/N10357// M&m //4500033156	76						76															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Slotted clip Supports	314 0007 15 B	4	19	76	L/N100315-01 / Batch 6	152						152															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Washers	263 0001 17 A	8	19	152	Airc.Spruce Can L/N40-15318 / P/Nar	152						152															
Bags with Extra Filler Blocks & Washers																																														
8	8	8	8	4	8	8	4	4	4	4	4	4	4	4	4	4	4	4	Filler blocks 1/8"	314 0015 01 A		19	100	L/N090219-01							100															
4	4	4	4	8	4	4	8	8	8	8	8	8	8	8	8	8	8	8	Filler blocks 3/32"	314 0014 01 A		19	128	L/N090219-02							128															
√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	√	Washers	263 0001 17 A	8	19	152	Airc.Spruce Can L/N40-15318 / P/Nar	152						152															

D.B. 2010-05-03

Helitowcart – NON CONFORMITY report	F80-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Section A - Non conformity description

Product / Output: BEARPAWS 44	NCR: 2011.02.03-nb-01 yyyy-mm-dd-initials-#
Product no: 112-0001-00	ASS no: —
Non conformities: LOT: HTC-RC-091210	CARPAR no: —
1) GROS FILLER BLOC ARRIERE PRE-INSTALLE AVEC AN4-14A. CE BOULON NE FAIT PAS PARTIE DU KIT. DES BOULONS AN4-15A AVAIENT DÉJÀ ET INSÉRÉS DANS SACS.	Supplier: —
	Supplier ref no: —
	Quantity rejected: 4 PAIRS
Initiated by: NP	Date: 2011 02 03
	Quantity in the lot: 4

Section B – Prescribed disposition

Decision & notes:	<input type="checkbox"/> Wait <input type="checkbox"/> Discard <input type="checkbox"/> Return to supplier	<input type="checkbox"/> Repair <input type="checkbox"/> Use as is <input checked="" type="checkbox"/> Derogation (=use as is with or without repair)
Actions	Resp	Verified by
1) POUR LES BOITES DÉJÀ VENDES: AUCUNE ACTION CAR ILS ONT TOUT EN MAIN ET IL EST EVIDENT QUE CE #14 EST TROP COURT PAR BLOC + U-CLIP.	—	NP
2) REMPLACER BOULONS AN4-14, PAR LES -15 (4 BOITES) → HTC-RC-091210-08 -11 -10 -12	L.B	N.B 2011 02 09
Prescribed by: NP	Date: 2011 02 03	

Section C – Final verification

Decision & notes: PADS CORRIGÉS + RÉ-CERTIFIÉS.
Closed by: NP
Date: 2011 02 09

Traceability data

Qty	Part No.	Desc:	Lot number
7 PAIRS	112 0001 00B	BP44 BEARPAW ASSY	HTC-LNF- 09 06 30-01 HTC-LNF-yymmdd-seq
Includes: 263 0001 17 A WASHERS LN 261755/NAS1149 F0463P => 160 8 N/A info			
14	314 0001 01 A	BEARPAW PAD	LN- 08 05 22-02 => 96 15 (DATE H6)
28	314 0006 15 B	U-SHAPED CLIP	LN- 06 09 05-04 => 96 1 (BATCH 1)
56	314 0007 15 B	SLOTTED CLIP SUPPORT	LN- 08 12 02-01 => 96 26 (BATCH 4)
32	314 0002 15 A	ICEBLADE ASSY	LN- 06 09 05-03 => 96 2 (BATCH 2)
28	261 0003 17 A	BOOTS AN4-16A	LN- 07 12 06-01 => 96 24 (A)
28	261 0002 17 A	BOOTS AN4-15A	LN- 08 12 01-06 => 96 28 (A)
112	262 0001 17 A	NUTS	LN- 06 09 05-02 => 96 4 (A)
28	314 0012 01 A	FILLER BLOCKS 1/4"	LN- 07 08 18-01 => 96 3 (A)
28	314 0014 01 A	" " 3/32"	LN- 06 09 05-01 => 96 3 (A)
28	314 0015 01 A	" " 1/8"	LN- 07 08 18-01 => 96 3 (A)

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES & NUTS	
B	100%	PRESENCE OF DOCUMENTS	
C	100%	ALL LN MATCH USED PARTS	
D	100%	ALL COMPONENTS PRESENT ON PADS OR BAG INCLUDED	
E	100%	BOX APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: N. Barlian Date: 09 06 30

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
09 06 30	7 PAIRS	OK NB		OK NB	OK NB	OK NB	
Derogation: Used 2x 1/8" Blocs instead of 1x 1/4" block, see "O"/APPROVED NB							

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: <u>N. Barlian</u>	Date: <u>2009.06.30</u>
Comments:		
RELEASE CERTIFICATES NO:		
HTC-RC-090630-01		
02		
03		
04		
05		
06		
07		

HTC-RC-090630-xx																				
1	2	3	4	5	6	7	HTC-LNF-090639-01	Qté par paire	Nb paires req	Qté totale pièces	Lot 1	Qty	Info	Lot2	Qty	Info	Lot3	Qty	Info	Qty tot
B6	B6	B6	B6	B6	B6	B6+B1	Bearpaw pads	314 0001 01 A	2	7	14	080522-02	13 Batch 6	060905-04	1	Batch 1				14
B4	B4	B4	B4	B4	B4	B4+B1	U-Shaped Clips	314 0006 15 B	4	7	28	081202-01	26 Batch 4	060905-03	2	Batch 1				28
A	A	A	B	B	B	C	Slotted clip Supports	314 0007 15 B	8	7	56	071206-01	24 A	081201-06	28	B	060905-02	4	C	56
D	E	E	E	E	E	E+F	Iceblade assy	314 0002 15 A	4	7	28	070818-01	4 D	081201-05	22	E	060905-01	2	F	28
i	i	i	i	i	i	J	Bolts AN4-16A	261 0003 17 A	4	7	28	API 58052/31582	26 I	non disp	2	J				28
G	G	G	G	G	G	G+H	Bolts AN4-15A	261 0002 17 A	4	7	28	M&M 10357	26 G	non disp	2	H				28
K	K	K	K	K	K	K+L	Nuts	262 0001 17 A	16	7	112	API 68222/71644	108 K	non disp	4	L				112
T	T	T	T	T	T	T+U	Washers	263 0001 17 A	24	7	168	261755/nas1149fo463p	160 T	non disp	8	U				168
M	M					M+N	Filler blocks 1/4"	314 0012 02 A	4	7	28	non disp	10 M	non disp	2	N				12
		O	O	O	O		Filler blocks 1/8"	314 0015 01 A				non disp	32 O							16
							Derogation:	Blocs 2 blocs de 1/8" remplacent un bloc de 1/4" (Paire -03, -04, -05, -06)												
							Correction de dérogation:	Remplacé les deux 1/8" par des 1/4" dans paires -04, -05, -06												
P	P	P	P	P	P	P+Q	Filler blocks 1/8"	314 0015 01 A	4	7	28	non disp	26 P	non disp	2	Q				28
R	R	R	R	R	R	R+S	Filler blocks 3/32"	314 0014 01 A	4	7	28	non disp	26 R	non disp	2	S				28
Non Conformity Report:																				
NCR 2009-12-08-nb-01																				
sold	sold	sold	yes	yes	yes	yes	1	Washers Missing on pair no 04,05,06,07 (possibly missing also on sold pair -01,-02,-03)												
							Action: Add 8 washers per pair													
							Action: Done by NB 2009 12 08													
							2	1/8" Filler blocks used to replace missing 1/4" filler blocks, are replaced back to 1/4" filler blocks, new batch LN-091208-01												
							Action: Take off 8x 1/8" filler blocks, and replace by 4x 1/4" filler blocks													
							This eliminates the derogation issued.													
							Action: Done by NB 2009 12 08													
							3	Contact customers and send necessary parts for pairs -01, -02, -03												
→ Decided not to send washers or filler																				

Decided not to send washers or filler because customers already have washers in stock and can use as many as needed as specified in installation instruction.

DP 2009 12 08

Helitowcart – NON CONFORMITY report	F80-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Section A - Non conformity description

Product / Output: BP44	NCR: 2009. 12.08. nb-01 yyyy-mm-dd-initials-#
Product no: 112 0001 00 B	ASS no: 2009. 10.26.01
Non conformities:	CARPAR no: —
1- MISSING PARTS IN PACKAGE (WASHERS - MISSING 8 PER KIT)	
WRONG QTY OF WASHERS	Supplier: —
2- REPLACE 1/4" WASHERS FOR 2x 1/8" (MORE PRACTICAL FOR CUST. ?)	Supplier ref no: —
	Quantity rejected: 7 PAIRS
Initiated by: NB Date: 09 12 08	Quantity in the lot: 7 PAIRS

Section B – Prescribed disposition

Decision & notes:	<input type="checkbox"/> Wait	<input checked="" type="checkbox"/> Repair
INSPECT ALL BOXES STILL IN STOCK	<input type="checkbox"/> Discard	<input type="checkbox"/> Use as is
CREATE EXCEL CHART TO SORT OUT AS LOT HAD BEEN CREATED OF MULTIPLE BATCHES	<input type="checkbox"/> Return to supplier	<input type="checkbox"/> Derogation (=use as is with or without repair)
Actions	Resp	Verified by
PAIRS STILL IN STOCK:		
PAIRS -04, -05, -06, -07: ADD PARTS	NB	NB 2009 12 08
PAIRS ALREADY SHIPPED TO CUSTOMERS:		
PAIRS -01, -02, -03: INFORM CUSTOMERS & SEND PARTS IF NEEDED.	NB →	ACTION * CANCELLED
* SINCE IT IS VERY MINOR & CUSTOMERS CAN USE THEIR OWN WASHERS I HAVE DECIDED NOT TO SEND WASHERS. / NB		
Prescribed by: NB Date: 09 12 08		

Section C – Final verification

Decision & notes:
ALL LOTS IN STOCK CORRECTED.
Closed by: N. Bailean Date: 2009 12 20

Traceability data

Qty	Part No.	Desc:	Lot number
<u>Pairs</u> 8	112 0001 00B	BP44 BEARPAW ASS'Y	HTC-LNF- 090202-01 HTC-LNF-yymmdd-seq

Includes:

16	314 0001 01 A	BEARPAW PAD	LN- 080522-02 (BATCH 16)
32	314 0006 15 B	4 SHAPED CLIP	LN- 081202-01
64	314 0007 15 B	SLOTTED CLIP SUPPORT	LN- 081201-06
32	314 0002 15 A	ICEBLADE ASS'Y	LN- 081201-05 (BATCH 14)
32	261 0003 17 A	AN4- 16A	LN- 58052/31582
32	261 0002 17 A	BOLTS AN4- 15A	LN- 10357
128	262 0001 17 A	NUTS	LN- 081231-01
32	314 0012 01 A	FILLER BLOCKS 1/4"	LN- 080313-01
32	314 0014 01 A	" " 3/32"	LN- 080909-02 (BATCH 10)
32	314 0015 01 A	" " 1/8"	LN- 080909-01 (BATCH 10)

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100 %	PRESENCE OF ICEBLADES + NUTS	
B	100 %	PRESENCE OF DOCUMENTS	
C	100 %	ALL LN MATCH USED PARTS	
D	100 %	ALL COMPONENTS PRESENT ON PAIRS OR BAG INCLUDED	
E	100 %	BOX APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: NB

Date: 09 02 02

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	No
090202	8 Pairs	OK	OK	OK	OK	OK	

Added TC 200

Release certificates issue

Release Certificates issued: yes no	By: <u>N. Barthelemy</u>	Date: <u>2009.02.19</u>
Comments:		
<p>RELEASE CERTIFICATES NO:</p> <p>HTC-RC-090202-01</p> <p>02</p> <p>03</p> <p>04</p> <p>05</p> <p>06</p> <p>07</p> <p>08</p>		

*ACCEPTED PAR
DEROGATION: BLACK SHIRT
OK

28
14
—
44

Traceability data

Qty	Part No.	Desc:	Lot number
PAIRS 4	112 0001 00 B	BP44 BEARPAW ASS'y	HTC-LNF- 081205-01 HTC-LNF-yymmdd-seq

Includes:

8	314 0001 01 A	BEARPAW PAD	LN- 080522-01 (Batch 5)
16	314 0006 15 B	L SHAPED CLIP	LN- 081202-02 (Batch 9)
32	314 0007 15 B	SLOTTED CLIP SUPPORT	LN- 071206-01 (Batch 4)
16	314 0002 15 A	ICEBLADE ASS'y	LN- 070818-01 (Batch 13) → QTE 8 081201-05 (Batch 14) → QTE 8
16	261 0003 17 A	BOOTS ANA - 16 A	LN- API 58052/31582-NA m+m 10357
16	261 0002 17 A	BOOTS ANA - 15 A	LN- API 0194681
64	262 0001 17 A	NUTS	LN- API 0194681
16	314 0012 01 A	FILLER BLOCKS 1/4"	LN- 080313-01
16	314 0014 01 A	" " 3/32"	080709-02
16	314 0015 01 A	" " 1/8"	080909-01

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES & NUTS	
B	100%	PRESENCE OF DOCUMENTS	
C	100%	ALL LN MATCH USED PARTS	
D	100%	ALL COMPONENTS PRESENT ON PADS OR BAG INCLUDED	
E	100%	BOX APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: DB Date: 081205

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
081205	4 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: <u>D. Salva</u>	Date: <u>081205</u>
Comments:		
<p>RELEASE CERTIFICATES</p> <p>HTC - RC - 081205 - 01</p> <p>02</p> <p>03</p> <p>04</p>		

ACCEPTÉ PAR DÉROGATION BLACK STARINK

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
2 ^{PAIRS}	112 0001 00 B	BP44 BEARPAW ASSY	HTC-LNF-081202-01 HTC-LNF-yymmdd-seq

Includes:

4	314 0001 01 A	BEARPAW PAD	LN- 07 03 11 - 01 (Batch 3)
8	314 0006 15 B	L SHAPED CLIP	LN- 08 12 02 - 02 (Batch 4)
16	314 0007 15 B	SLOTTED CLIP SUPPORT	LN- 07 12 06 - 01 (Batch 4)
8	314 0002 15 A	ICEBLADE ASSY	LN- 07 08 18 - 01 (Batch 3)
8	261-0003-17 A	AN4-16 A	LN- API 58052/31582
8	261-0002-17 A	BOLTS AN4-15 A	API 10357
32	262 0001 17 A	NUTS	LN- API 64171/713394
8	314 0012 01 A	FILLER BLOCKS 1/4"	LN- 08 03 13 - 01
8	314 0014 01 A	" " 3/32"	LN 08 09 09 - 02
8	314 0015 01 A	" " 1/8"	LN 08 09 09 - 01

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES & NUTS	
B	100%	PRESENCE OF DOCUMENTS	
C	100%	ALL LN MATCH USED PARTS	
D	100%	ALL COMPONENTS PRESENT ON PADS OR BAG INCLUDED	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: <i>NP</i>			Date: 08 12 01

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
08 12 02	2 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: <i>N. Bauman</i>	Date: 08 12 02
Comments:		
RELEASE CERTIFICATES		
HTC-KC-081202-01 02		

Traceability data

Qty	Part No.	Desc:	Lot number
3 PAIRS	112.0001.00B	BP44 BEARPAW ASS'y	HTC-LNF- 081030-01 HTC-LNF-yyymmdd-seq

Includes:

6	314 0001 01 A	BEARPAW PAD	LN- 070311-01 (DE LA BALANCE DE BATCH #13)
12	314 0006 15 B	L SHAPED CLIP	LN- 070126-01
24	314 0007 15 B	SLOTTED CLIP SUPPORT	LN- 071206-01
12	314 0002 15 A	ICEBLADE ASS'y	LN- 070818-01
12	261 0003 17 A	BOLTS AN4- 16A	LN- 58052/31582 API PRODUCTS
12	261 0002 17 A	BOLTS AN4- 15H	10357/2006H01571 M&M AEROSPACE HARD.
48	262 0001 17 A	NUTS	LN- 64171/713396 API PRODUCTS
12	314 0012 01 A	FILLER BLOCKS 1/4"	LN- 080313-01
12	314 0014 01 A	" " 3/32"	LN- 080909-02
12	314 0015 01 A	" " 1/8"	LN- 080909-01

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES & NUTS	
B	100%	PRESENCE OF DOCUMENTS	
C	100%	ALL LN MATCH USED PARTS	
D	100%	ALL COMPONENTS PRESENT ON PADS OR BAG INCLUDED	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: N. Barbeau			Date: 081030-

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2008/10/30	3 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: N. Barbeau	Date: 081030
Comments:		
RELEASE CERTIFICATE ISSUED:		
HTC-RC-081030-01		
- 02		
- 03		

Traceability data

Qty	Part No.	Desc:	Lot number
9 ^{PAIRS}	112.0001.00 B	BP44 BEARPAW ASSY	HTC-LNF- 080415-01 HTC-LNF-yyymmdd-seq

Includes:

2B 18	314.0001.01 A	BEARPAW PAD	LN- 080414-01
2B 36	314.0006.15 B	L-SHAPED CLIP	LN- 070126-01
2B 72	314.0007.15 B	SLOTTED CLIP SUPPORT	LN- 071206-01
2B 36	314.0002.15 A	ICE BLADE ASSY	LN- 061114-03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES + NUTS	
B	100%	PRESENCE OF DOCUMENTS (4)	
C	100%	ALL LN MATCH USED PARTS FOR LOT	(FUTURE LOTS: 080909 NB)
D	100%	ALL COMPONENTS PRESENT ON TRAYS OR BAGS INCLUDED	(INCL BOLTS, NUTS, SPACERS) NB
E	100%	BOX APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: N. Bailean Date: 08.04.15

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
080415	9 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: N. Bailean	Date: 08.04.15
Comments:		
RELEASE CERTIFICATE ISSUED:		
HTC. RC. 080415-01		
02 05		
03 06		
04 07		

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
5 PAIRS	112.0001.00 B	BP44 BEARPAW ASSY	HTC-LNF- 070823-01 HTC-LNF-yymmdd-seq
Includes:			
10	314.0001.01 A	BEARPAW PAD	LN- 07 03 11-01
20	314.0006.15 B	U-SHAPED CLIP	LN- 06 11 14-02
40	314.0007.15 B	SLOTTED CLIP SUPPORT	LN- 06 11 14-01
20	314.0002.15 A	ICEBLADE ASSY	LN- 06 11 14-03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES + NUTS	
B	100%	PRESENCE OF DOCUMENTS (9)	
C	100%	ALL IN MATCH USED PARTS FOR LOT	
D	100%	ALL COMPONENTS PRESENT ON PADS OR BAGS INCLUDED	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: J. Barbeau			Date: 07-08-23

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
070823	5 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	SAME LOTS AS PREVIOUS BATCH

Release certificates issue

Release Certificates issued: yes no	By: J. Barbeau	Date: 07-08-23
Comments:		
RELEASE CERTIFICATE ISSUED:		
HTC-LC-070823-01		
02		
03		
04		
05		

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
8 PAIRS	112.0001.00B	BP44 BEARPAW ASSY	HTC-LNF- 070820-01 HTC-LNF-yymmdd-seq
Includes:			
5	314.0001.01 A	BEARPAW PAD	LN- 061114-04
9	314.0001.01 A	BEARPAW PAD	LN- 070311-01
32	314.0006.15 B	L-SHAPED CLIP	LN- 061114-02
72	314.0007.15 B	SCOTTED CLIP SUPPORT	LN- 061114-01
32	314.0002.15 A	ICEBLADE ASSY	LN- 061114-03
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100 %	PRESENCE OF ICEBLADES + NUTS	
B	100 %	" OF DOCUMENTS (4)	
C	100 %	ALL LN MATCH USED PARTS FOR LOT	
D	100 %	ALL COMPONENTS PRESENT OR PADS OR BAGS INCLUDED	
E	100 %	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: N. Barbeau			Date: 2007.08.20

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2008.08.20	8 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: N. Barbeau	Date: 2007.08.20
Comments:		
RELEASE CERTIFICATES ISSUED:		
HTC-RC-070820-01, 05		
02, 06		
03, 07		
04, 08		

Traceability data

Qty	Part No.	Desc:	Lot number
9 PAIRS	112.0001.00.B	BP44 BEARPAW ASSEMBLY	HTC-LNF- 070314- 01 HTC-LNF-yymmdd-seq
Includes:			
18	314.0001.01.A	BEARPAW PAD	LN- 061114-04
36	314.0006.15.B	UPHATED CLIP	LN- 061114.02
81	314.0007.15.B	SLOTTED CLIP SUPPORT	LN- 061114.01
36	314.0002.15.A	ICE BLADE ASSY	LN- 061114.03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100 %	PRESENCE OF ICEBLADES	ICEBLADES IN PLACE
B	100 %	PRESENCE OF DOCUMENTS	ALL 3 DOC. IN BAG
C	100 %	ALL LN MATCH USED PARTS	FOR LOT
D	100 %	ALL COMPONENTS PRESENT ON PADS OR BAGS INCLUDED	
E	100 %	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: <i>N. Bouteau</i>			Date: 2007.03.14

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
2007.03.14	9 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: <i>N. Bouteau</i>	Date: 2007.03.14
Comments:		
<p>RELEASE CERTIFICATES ISSUED:</p> <p>HTC-RC- 070314 - 01, 06, 02, 07, 03, 08, 04, 09, 05,</p>		

Traceability data

Qty	Part No.	Desc:	Lot number
3 PAIRS	112-0001-003	BP44 BEARPAW ASSEMBLY	HTC-LNF-061123-01 HTC-LNF-yymmdd-seq
Includes:			
6	314-0001-01-A	BEARPAW PAD	LN-061114-04
12	314-0006-15-B	BEARPAW L SHAPED CLIP	LN-061114-02
24	314-0007-15-B	BEARPAW SLOTTED CLIP SUPP	LN-061114-01
12	314-0002-15-A	BEARPAW ICE BLADE ASSY	LN-061114-03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	ICEBLADES IN PLACE (INSTALLED)
B	100%	PRESENCE OF DOCUMENTS	ALL 3 DOC. IN BAG: INSTR/CERTIF/LIST PARTS
C	100%	ALL LN MATCH USED PARTS FOR LOT	SAME
D	100%	ALL COMPONENTS PRESENT ON PADS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by:			Date:

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
2006.11.23	3 PAIRS	✓ NB	✓ NB	✓ NB	✓ NB	✓ NB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: NATHALIE BARBEAU	Date: 2006.11.23
Comments:		
<p>RELEASE CERTIFICATES ISSUED:</p> <p>HTC-R-061123-01</p> <p>-02</p> <p>-03</p>		

Traceability data

Qty	Part No.	Desc:	Lot number
10 PAIRS	112-0001-00-B	BP44 BEARPAW Assy	HTC-LNF-060905-01 HTC-LNF-yymmdd-seq

Includes:

20/20	314-0001-01-A	BEARPAW PAD	LN- 060905-04
40/36 ^{40 NB}	314-0006-15-B	BEARPAW U-SHAPED CUP	LN- 060905-03
40/69	314-0007-15-B	BEARPAW SLOTTED CUP SUPP.	LN- 060905-02
*40/40	314-0002-15-A	BEARPAW ICE BLADE ASSY	LN- 060905-01
			LN-
			LN-
			LN-

*ALL 40 ARE APP'D. HOWEVER THEY WILL BE SOLD AS OPTION SO MAY NOT NEED TO USE ALL 40 FOR THIS LOT. DB

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICE BLADE KIT*	1 BAG WITH ICE BLADE+NUT+WASHER
B	100%	PRESENCE OF INSTR+ETC+MDL	ALL 3 DOC. IN BAG
C	100%	ALL LN # MATCH USED PARTS FOR LOT	"
D	100%	BOX APPROPRIATELY IDENTIFIED	
E	100%	ALL COMPONENTS PRESENT ON PADS. SEE 112-0001-00-C	
Inspection Plan approved by:		Date:	

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
060905	10 SETS	✓ NB	✓ NB	✓ NB	✓ NB	✓ NB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: N. Barbeau	Date: 2006-09-05
Comments:		
Release Certificate No issued:		
HTC-060905-01, HTC-060905-06		
" -02, -07		
" -03, -08		
" -04, -09		
" -05, -10		

BP350 LNF Insp

Audit TC 2017

Helitowcart - RELEASE INSPECTION

Reviewed & approved by:

F40-02

Page 1 of 1

2006 09 09

Traceability data

Qty	Part No.	Desc:	number
20	112 000200 S.E	BP350 STREAMCINED (with DART BATS BUCKET)	HTC-LNF- 160425-01 HTC-LNF-yymmdd-seq
Includes:			
			LN-
			LN-
			LN-
			LN-
			LN-
			LN-
			LN-

For MAXIME: See ↑
HERE ARE THE Post-its
DOCUMENTS TO PUT IN
EACH BP KIT
DAR

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEPACKS IN BAGS (8 EACH)	
B	100%	" " DOCUMENTS IN BAGS	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	" " COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: D. Sarré

Date: 2016 11 28

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2016 11 28	20	OK JB	OK JB	OK JB	OK JB	OK JB	12 PADS WITH ESTHET. IRREG. 1 PAD IMM SHORTER APP'D BY DEROGATION D.B.

Release certificates issue

Release Certificates issued: yes no By: D. Sarré Date: 2017 01 04

Comments:

HTC-LNF-160425-(01) TO (20)

HTC-RC-160425-01																				HTC-LNF-160425-01																													
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	P/N	Qté par paire	Spares	Nb paires req	Qté totale pièces	Lot 1	Qty	Lot 2	Qty	Lot 3	Qty																			
Pads																				Bp pads STREAMLINE	314 0018 01 C	2		20	40	LN-161127-01	40																						
Iceblade Assy (**not installed, simply inserted parts into bag)																				Iceblade Assy	263 0005 15 C	8		20	160	LN-141106-01	160																						
																				Nuts	262 0001 17 A	16		20	320	API LN 86168/724056	314	API LOT82694/722904	6																				
L2	L2	L2	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	16		20	320	API LOT 82768/Y0613	272	87914/SA5217	48			320																	
Bags with parts for customer assy of Front U-clips																				U-shaped Clips	314 0019 15 B	6		20	120	LN-160422-01-04	120																						
																				Slotted clip Supports	314 0007 15 B	12		20	240	LN-160421-04	240																						
																				Bolts AN4-14A	261 0001 17 A	12		20	240	API LOT 80195/4475	190	API LOT 79720/4256	44	API LOT 84669/74351	6																	240	
																				Nuts	262 0001 17 A	12		20	240	API LOT 86168/724056	240																						
																				Washers	263 0001 17 A	24	2	20	520	API LOT 87914/SA5217	520																						
																				Filler blocks 1/4"	314 0012 02 A	12		20	240	LN-120516-03	240																						

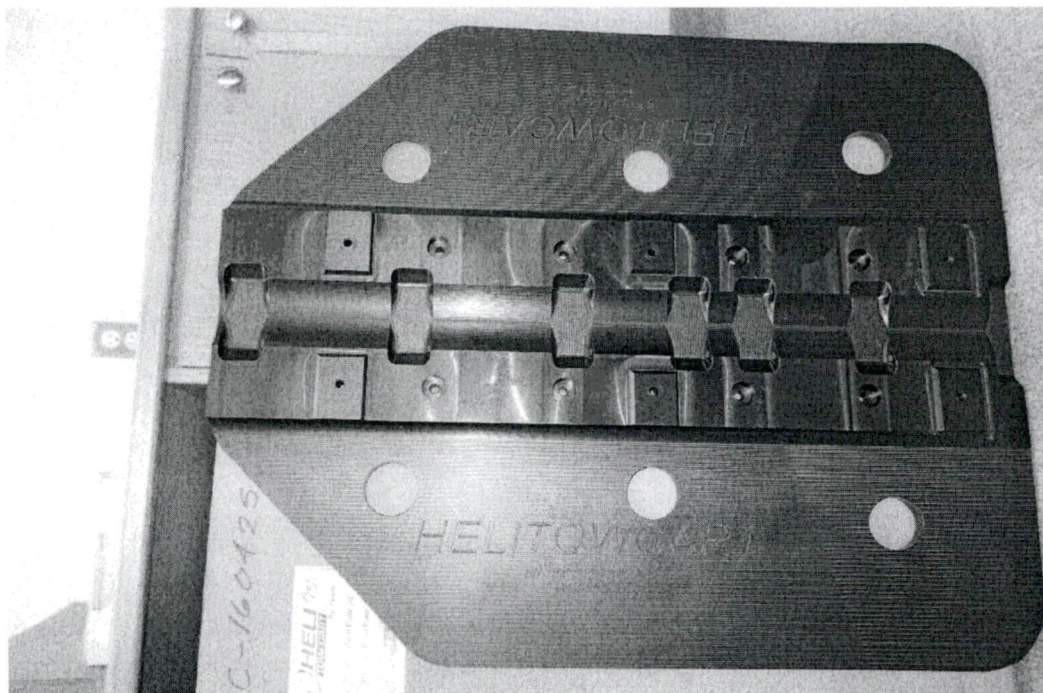
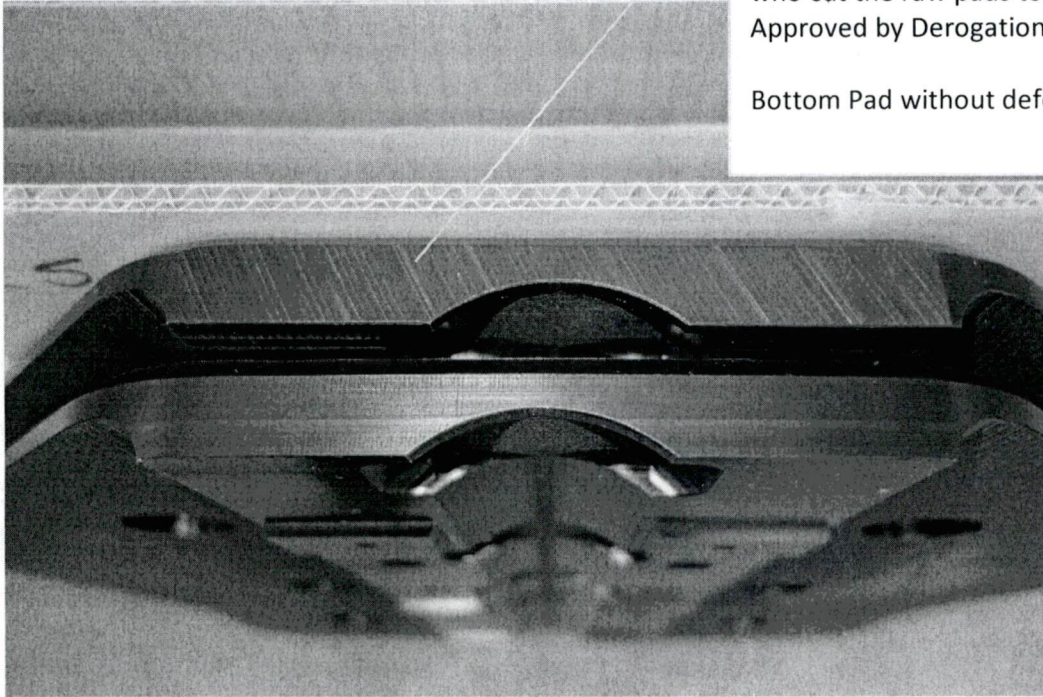
R. Sauton
2017 01 04

LN-161127-01 Batch 8 / BP350 first batch with the Pockets for Dart Wear Shoe Bolts. / NB

Top Pad with defect:

Rougher sawing marks by supplier of CNC
who cut the raw pads too close to the.
Approved by Derogation by N.Barbeau

Bottom Pad without defect:



MDL

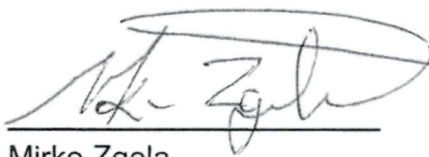
Master Document List

Helitowcart

Eurocopter Model AS 350/355 Series Helicopters Installation of BearPaw Model BP350

Report: HTC-MDL-BP-AS350/355-1000 (Rev H)

APPROVED BY:

DATE: MAY 30, 2016

Mirko Zgela

Design Approval Representative DAR #310

Revision	Revision Date	Revision of Entry	Entered by
A	Nov 22, 2006	Initial issue	N/A
B	Jan 28, 2007	Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
C	Feb 28, 2007	Addition of streamline pad configuration. Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
D	July 27, 2008	Addition of vents holes in the streamline pad.	M.Z.
E	Aug 01, 2008	Modification of vents holes in the streamline pad.	M.Z.
F	April 8, 2010	Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
G	December 21, 2012	Updated Tolerance data regarding Pad and Updated referenced document identification and revisions	M.Z.
H	May 30, 2016	Added recesses for skid wear shoes and leaf spring on streamline BearPaw (Dwg # 314-0018-01-S) and allowed trimming/machining of recesses on previous models provided the relief leaves at least 0.500" thickness.	M.Z.

1.0 MASTER DOCUMENTS

Document #	Title	Revision Status	Approval by	Date
AAC-CPL-BP-AS350/355/EC130-1000	Compliance Plan – Eurocopter Model AS350/355/EC130 Series Helicopters – Installation of BearPaw Model BP350 and BP130	B	DAR 310	May 11, 2011
HTC-314-0020-00-E	BearPaw Model BP350 – Installation Instruction – AS350/355 Series Helicopters	G	DAR 310	May 30, 2016
AAC-STR-BP-AS350/355-1000	Structural Substantiation – Helitowcart Inc. BearPaw Model BP350	NC	DAR 310	Nov 20, 2006
AAC-FTR-C-GZNC	Simple External Modification – Applicant's Flight Test Plan/Report	NC	DAR 310	Nov 21, 2006
HTS-EO-0709-002	Bear Paw Model BP350 Vent Holes	A	DAR 310	July 31, 2008
HTC-MEM-0709-001	Memorandum – Vent Hole BP350 BearPaw	A	DAR 310	July 31, 2008
HTC-TM-0709-001	Structural Substantiation – BearPaw Streamline BP350 with Recesses Wear Pads	NC	DAR 310	May 30, 2016

2.0 MASTER DRAWINGS

Drawings #	Title	Revision Status	Approval by	Date
112-0002-00	BearPaw BP350 - Assembly	B	DAR 310	Nov 20, 2006
112-0002-00-S	BearPaw BP350 – Assembly Streamline	E	DAR 310	May 30, 2016
314-0002-15 (VNR084)	BearPaw – Iceblade	A (R01)	DAR 310	Apr 24, 2006
314-0004-15 (VNR085)	BearPaw – Iceblade Threaded Rod	A (R01)	DAR 310	Apr 24, 2006
314-0005-15 (VNR086)	BearPaw – Iceblade Assembly	A (R01)	DAR 310	Apr 24, 2006
314-0007-15 (VNR089)	Bearpaw – Slotted Clip Support	B (R04)	DAR 310	July 31, 2006
314-0012-01 (VNR099)	Filler Block 1/4"	A (R01)	DAR 310	Aug 8, 2006
314-0018-01 (VNR106)	BearPaw BP350 - Pad	B (R02)	DAR 310	Sept 26, 2006
314-0018-01-S (VNR106-S)	BearPaw BP350 – Pad Streamline	E	DAR 310	May 30, 2016
314-0019-15 (VNR107)	BearPaw BP350 – U Shaped Clip	A (R01)	DAR 310	Sept 29, 2006

3.0 REFERENCE DOCUMENTS

Document #	Title	Revision Status	Approval by	Date
314-0009-01	Ultra High Molecular Weight Polyethylene – Typical Properties	A	N/A	May 24, 2006
314-0008-01	Material Properties - UHMW TIVAR	A	N/A	May 24, 2006
314-0017-05	Heat Shrink Specifications	A	N/A	Sept 6, 2006

INSTALL. INSTR

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Annex B (Tolerance Zones for Cracks and Wear)	

INTRODUCTION

Scope

This installation instruction describes the step-by-step approach to install and to perform maintenance of the Helitowcart BearPaw Model BP 350 (P/N 112-0002-00 or P/N 112-0002-00-S) for the AS 350 and AS 355 series helicopters.

General

The Helitowcart BearPaw is made of machined UHMW TIVAR® polymer sheet. This material combines high-impact performance, low friction and good resistance to chemical. Its high durability will provide superior performance when installed on your helicopter. Any question regarding the Helitowcart BearPaw system shall be directed to Helitowcart Customer Support as indicated in Table (1):

Table 1 – Helitowcart Customer Support

Care of	Mailing Address	Phone, Fax & Email:
Customer Support Helitowcart BearPaw Helitowcart (Vanair inc)	860 Marie-Victorin St-Nicholas, Levis, Quebec, Canada, G7A 3S9	Tel:1 (418) 561-4512 Fax:1 (418) 836-4575 info@helitowcart.com

Helicopter Effectivity

This installation instruction applies to the following helicopter models:

Table 2 – Helicopter Model Effectivity

Make	Model	Transport Canada Type Certificate Data Sheet
Eurocopter	AS 350 D	H-83
Eurocopter	AS 350 D1	
Eurocopter	AS 350 B	
Eurocopter	AS 350 B1	
Eurocopter	AS 350 B2	
Eurocopter	AS 350 B3	
Eurocopter	AS 350 BA	
Eurocopter	AS 355 E	H-87
Eurocopter	AS 355 F	
Eurocopter	AS 355 F1	
Eurocopter	AS 355 F2	
Eurocopter	AS 355 N	

Installer Responsibilities

The installer shall ensure that the installation of the Helitowcart BearPaw does not conflict with any other part of the helicopter configuration. Technicians performing this installation should be familiar with A/C work and should have been familiarized with the different Helitowcart BearPaw system components prior to performing a first time installation. All steps in this procedure must be followed. Deviations from the procedures may result in potential structural failure or equipment malfunction and will result in a non-compliant installation.

INSTALLATION

BearPaw Installation

Reference Documentation:

- [1] Helicopter Maintenance Manual AS 350 or AS 355 as applicable.

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] as applicable to your helicopter model to allow a ground clearance of the skid in the area of the aft cross tube of approximately 1 1/2" (38mm);

Note: The BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) can be installed with or without the skid tube wear shoes.

Step 2: IceBlade Installation

Note: The BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) can be installed with or without the IceBlades

- With IceBlade Option
- Install ice blades (Qty: 4) (Iceblades P/N 314-0005-15) under BearPaw pad as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A.
- Secure ice blades with washer (Washer P/N 263-0001-17) and nut (P/N 262-0001-17).

Step 3: BearPaw Installation

- Position the BearPaw under the skid as shown in Figure 1 with narrow edge pointing forward.
- Insert washers (P/N 263-0001-17) through all six bolts: 6x(261-0001-17);
- Insert bolts (P/N 261-0001-17) and washer (Washer P/N 263-0001-17) through BearPaw pad as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A;
- Insert filler blocks (P/N314-0012-01) as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A;

Note: The use of filler blocks (P/N314-0012-01) may be replaced or complemented by the use of washers (P/N 263-0001-17) to fill in the gap. Bolts (P/N 261-0001-17) may be replaced by longer or shorter AN4 bolts as required.

- Insert both U-shaped clips (P/N 314-0019-15) through bolts: 6x(261-0001-17);
- Insert slotted clip supports (P/N 314-0007-15) through all six bolts. Position slotted clip supports with rounded edge toward helicopter skid;
- Insert washer (P/N 263-0001-17) & screw nuts (P/N 262-0001-17) for a tight fit. Max. torque on nuts 60 in.-lb;
- Remove helicopter from lift;
- Amend Weight & Balance records as required using data provided in Table 3.

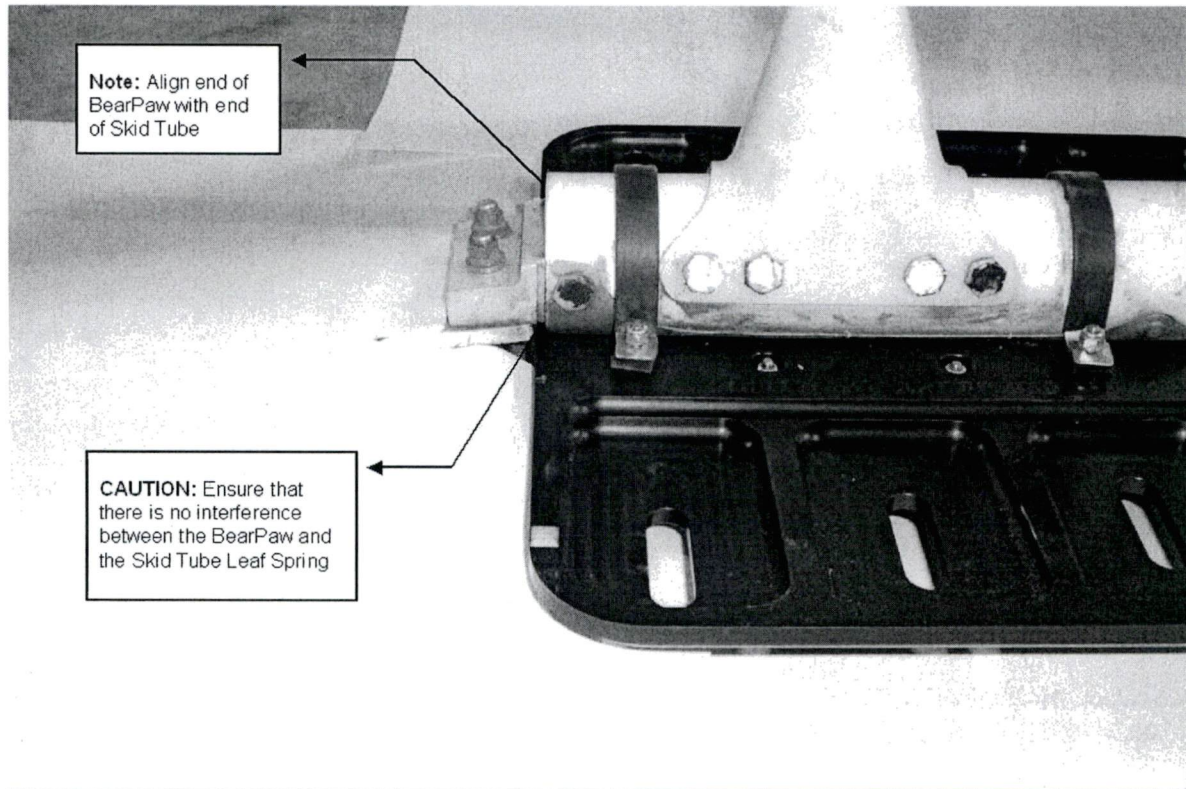


Figure 1 – BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) - Alignment on Skid

BearPaw Removal

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] to allow a clearance of the skid in the area of the aft cross tube of approximately 1 ½" (38mm);

Step 2: BearPaw Removal

- Remove nuts (P/N 262-0001-17), slotted clip support (P/N 314-0007-15) on U-shaped clips (P/N 314-0019-15),
- Remove washers (P/N 263-0001-17), U-shaped clips (P/N 314-0019-15), filler blocks (P/N 314-0012-01), and remove BearPaw pad (P/N 314-0018-01) or (P/N 314-0018-01-S Streamline);
- Inspect skid tubes to confirm serviceability
- If the skid tube shoes have been removed, re-install shoes as per reference [1];
- Complete installation by putting helicopter back to normal position by removing lift status;
- Amend Weight & Balance records as required using data provided in Table 3.

Weight & Balance

The following information should be used to amend the helicopter weight and balance information following the installation or removal:

Table 3 – Weight & Balance Data ⁽¹⁾

Item	Weight	Lateral		Longitudinal	
		Arm	Moment	Arm	Moment
Helitowcart BearPaw Model BP350 (P/N 112-0002-00)	19,9 Lb 9,0 Kg	N/A	N/A	159,4 in. 404.9 cm	3172.0 in-lb 36.44 m-kG
Helitowcart BearPaw Model BP350 - <u>Streamline</u> (P/N 112-0002-00-S)	18,3 Lb 8,5 Kg	N/A	N/A	159,4 in. 404.9 cm	2917.0 in-lb 34.41 m-kG

Notes:

(1) Weight and moment provided are for full kit installation (two BearPaw assemblies).

Parts Lists

The Helitowcart BearPaw detailed parts list is as follows.

Table 4 – Part List (one BearPaw)

Description	Qty	Part / Dwg No.	Additional Drawing Reference No./ Name
BearPaw Assembly Model BP350	1	112-0002-00 or 112-0002-00-S	BearPaw Assembly – Pocket Style, or Bear Paw Assembly – Streamline
BearPaw Pad ⁽¹⁾ Model BP350	1	314-0018-01 or 314-0018-01-S	BearPaw BP350 – Pocket Style Pad (VNR106) or BearPaw BP350 – Streamline Pad (VNR106-S)
U Shaped Clips	3	314-0019-15	BearPaw BP350 - U Shaped Clips (VNR107)
Slotted Clip Support	6	314-0007-15	BearPaw - Slotted Clip Support (VNR089)
Filler blocks 1/4"	6	314-0012-01	BearPaw – Filler block ¼" (VNR099)
Bolts	6	261-0001-17	Bolt- AN4-14
Nuts	6	262-0001-17	Nut- MS20365-428
Washers	12	263-0001-17	Washer – AN960-416
Shrink	3	314-0021-01	BearPaw – Shrink Specifications & Install.(1"x6.25")
IceBlade Option Model OIB	4	314-0005-15	IceBlade Assembly (VNR086)
Nuts	8	262-0001-17	Nut- MS20365-428
Washers	8	263-0001-17	Washer – AN960-416

Note (1): Use pocked shaped BearPaw Pad P/N 314-0018-01 for assembly P/N 112-0002-00. Use streamlined Pad P/N 314-0018-01-S for assembly P/N 112-0002-00-S as applicable.

INSPECTION

Life Limited Items

There are no life limited items for the Helitowcart BearPaw.

Pre-Flight

Before each flight the following items should be inspected:

- Check that attachment bolts are installed and secured,
- Check that BearPaws are free from visible damage,
- If damage is found, verify allowable damage according to Tables 5 & 6 and Annex B – Tolerances for cracks & wear

Periodic Inspection Schedule

- The Helitowcart BearPaw shall be inspected every 600 flying hours or yearly whichever comes first.
- The Helitowcart BearPaw can be inspected concurrently with the helicopter landing gear inspection.
- Recommended tolerance for performance of inspection is +/- 10% of the 600 hours period.
- Following an inspection, subsequent interval shall be adjusted to meet the original schedule from time of inspection. If inspection is performed earlier than the 10% tolerance, then following inspections shall be scheduled not to exceed the above mentioned tolerance.

600 Hours or Yearly Inspection Details

- Remove Helitowcart BearPaw: See Section "BearPaw Removal",
- Inspect all parts for damage & wear. See Tables 5 & 6 and Annex B – Tolerances for cracks & wear.
- Replace all parts damaged beyond tolerances.

Table 5 – Tolerances for Cracks & Wear / Pocket Pad 314-0018-01 (VNR 106)

Zone	Nominal Dimension (Inches)	Allowable Damage/Wear (Inches)	Cracks
A	0,50	0,050	
B	1,000	0,250	
C	0,375	0,075	<u>Pockets</u> : Cracks are acceptable in the Helitowcart BearPaw pocket areas to a maximum length of 0,5" provided they are 0,25" away from the stiffener radius change. Stop drill cracks with a 0,125" hole.
D	0,50	0,050	<u>Stiffeners</u> : NO cracks in stiffeners.

Table 6 – Tolerances for Cracks & Wear / Streamline Pad 314-0018-01-S (VNR 106-S)

Zone	Nominal Dimension (Inches)	Allowable Damage/Wear (Inches)	Cracks
A	0,50	0,050	
B	1,000; and 0,88	0,250	
C	0,273 to 0,348 (variable thickness)	0,075	Cracks are acceptable in zone C under the Helitowcart BearPaw to a maximum length of 0,5". Stop drill cracks with a 0,125" hole.
D	0,49 (thickness after radius)	0,075	No cracks in the radius
E	0,38	0,075	No cracks in the BearPaw contour

Pad Recesses for Skid Wear Shoes and Leaf Spring

BearPaw 314-0018-01-S may be trimmed/machined to clear wear shoe mounting screws and skid leaf spring provided the recesses leave at least 0.500" thickness and provided that maximum lengths and widths of Figure 2 are not exceeded.

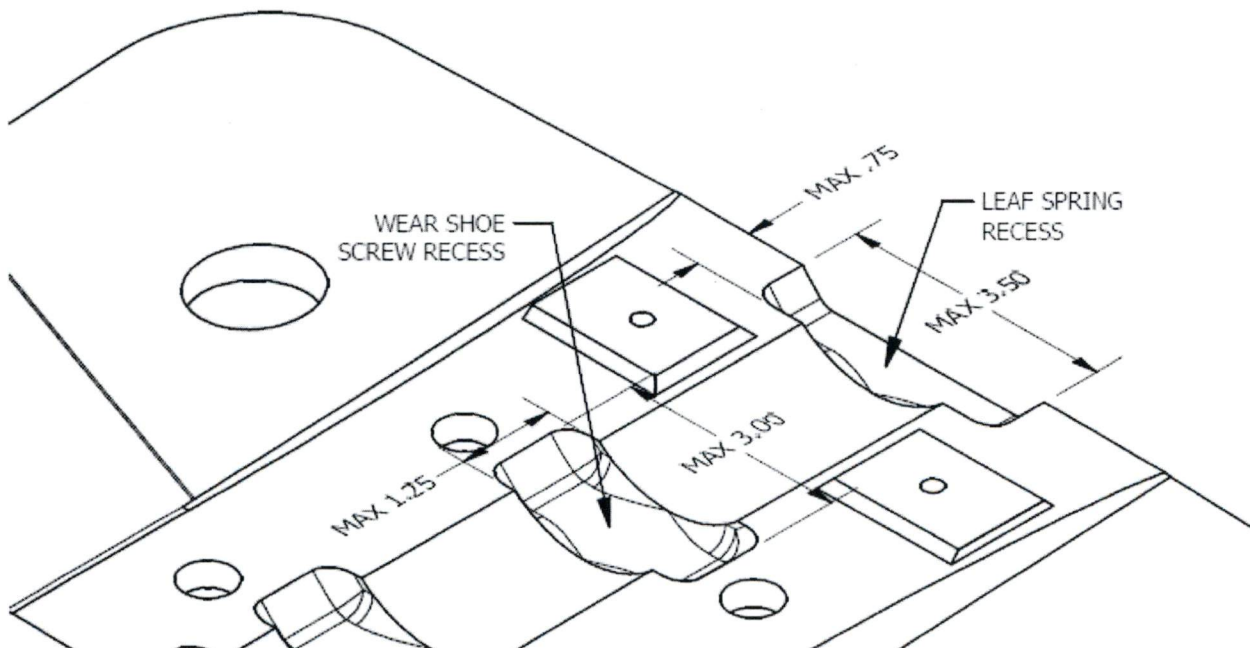


Figure 2 – Maximum Dimensions of Recesses

Overhaul Requirements


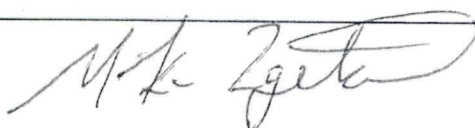
- Not applicable for the designated application of this device.

REVISIONS & APPROVAL

Revisions

Date	Rev	Nature of Revisions
Nov 20, 2006	A	Initial issue
Jan 29, 2007	B	Minor editorials. Change to weight & Balance Data to reflect production model. Change in inspection schedule from 300 to 500 hours to match existing landing gear periodicity.
Feb 28, 2008	C	Introduction of new streamline BearPaw Pad configuration as alternate.
Aug 01, 2008	D	Modification of vent holes on the streamline pad
April 8, 2010	E	Correction to C of G data
December 21, 2012	F	Updated Pad Tolerances and Document identifications . Improved page set up for reader convenience.
April 29, 2016	G	Added recesses for skid wear shoes and leaf spring on streamline BearPaw and allowed trimming/machining of recesses on previous models provided the relief leaves at least 0.500" thickness.

Approval

Internal Approval :		
Helitowcart inc.	 Lucien Barbeau, President	Date: May 30, 2016
External Approval :		
Transport Canada	 Mirko Zgela, DAR #310	Date: May 30, 2016

Annex A – BearPaw Assembly Drawing

See: BearPaw Assembly, dwg no. (112-0002-00) for Pocket style pad or;
BearPaw Assembly, dwg no. (112-0002-00-S) for Streamline pad

Annex B – Tolerance Zones for Cracks and Wear

See: BearPaw Pad, dwg no. 314-0018-01 (VNR106) for Pocket style pad;
BearPaw Pad, dwg no. 314-0018-01-S (VNR106-S) Rev A to D for Streamline pad without recess;
BearPaw Pad, dwg no. 314-0018-01-S (VNR106-S) Rev E for Streamline pad with recesses.

Annex A – BearPaw Assembly Drawing



BY VANAIR

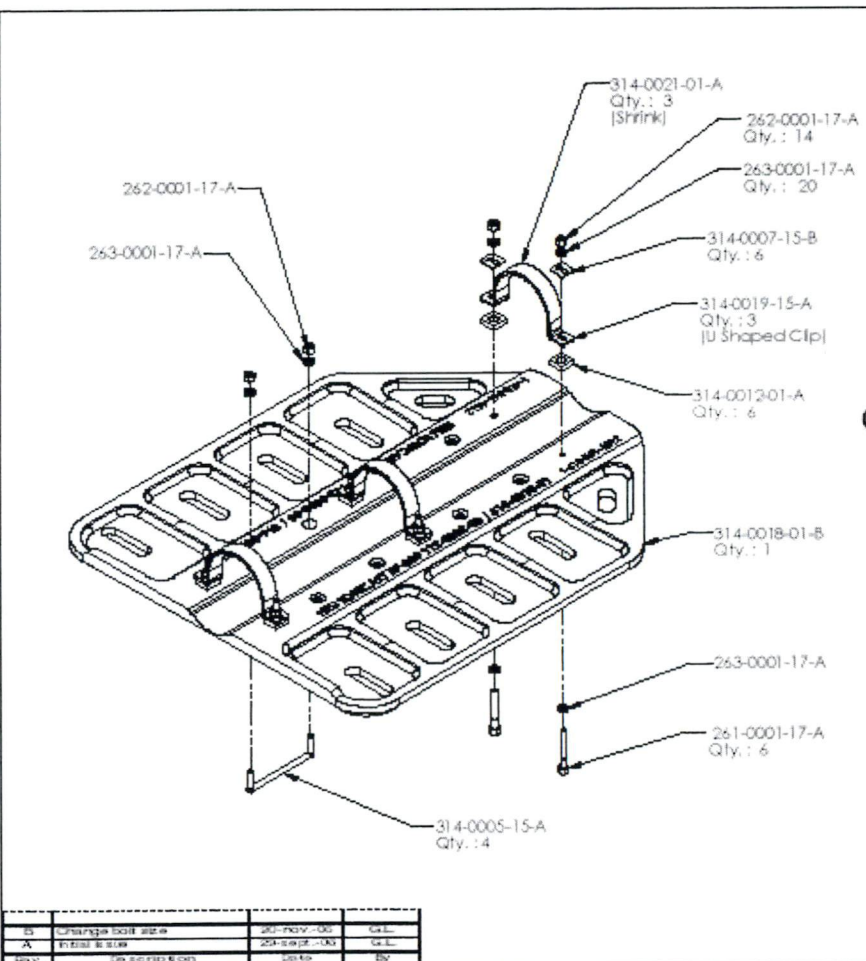
314-0020-00-E Rev. G
BearPaw Model BP350
Installation Instructions – AS350/355

Pocket Style Pad – Dwg 112-0002-00

No.	Qty.	Description	Part #	Rev #
1	1	Bearpaw BP-350 - Pad	314-0018-01	B
2	3	Bearpaw BP-350 - U shaped clip	314-0019-15	A
3	3	Bearpaw BP-350 - Shrink 1" x 6 1/4"	314-0021-01	A
4	6	Bearpaw - Slotted clip support	314-0007-15	B
5	6	Bearpaw - Filter Block 1/4"	314-0012-01	A
6	4	Bearpaw - Iceblade Assembly	314-0005-15	A
7	6	Bolt AN4-14A	261-0001-17	A
8	20	Washer AN960-416	263-0001-17	A
9	14	Nut MS20365-428	262-0001-17	A



Note : Iceblade assembly can be omitted from installation (Optional)



HELI TOW CART		Vanair Inc.		112-0002-00	
314-0020-00-E		112-0002-00		112-0002-00	
11/20/2006		5		1	
112-0002-00		112-0002-00		112-0002-00	
112-0002-00		112-0002-00		112-0002-00	



BY VANAIR

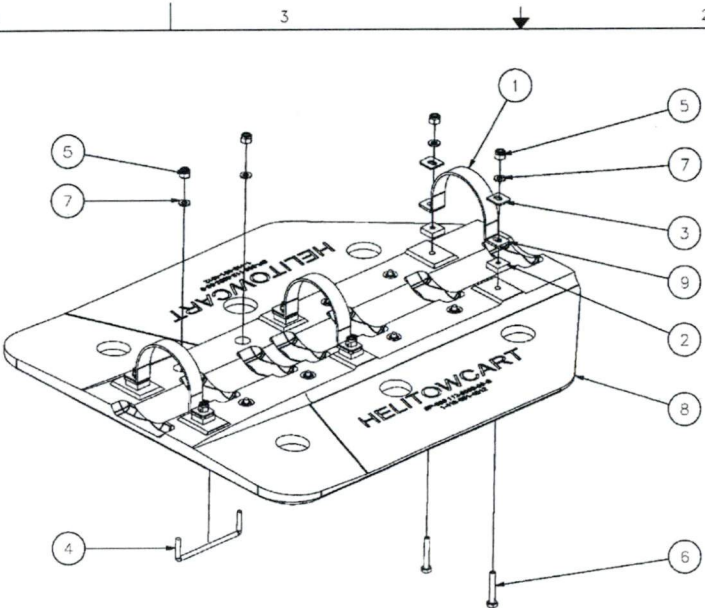
Installation Instructions – AS350/355

314-0020-00-E Rev. G
BearPaw Model BP350

Streamline Pad – Dwg 112-0002-00-S

REVISONS		DATE	BY	CHK
1	2	3	4	5
ZONE	REV	DESCRIPTION		
A		ADDITION OF STREAMLINE PAD CONFIGURATION		
B		ADDITION OF VENT HOLES ON THE STREAMLINE PAD		
C		MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD		
D		DELETED REVISIONS IDENTIFICATION IN PART NUMBER		
E		ADDED RECESSES FOR SKID WEAR SHOES AND LEAF SPRING		

NOTE: ICEBLADE ASSEMBLY, ITEM4, CAN BE OMITTED FROM INSTALLATION (OPTIONAL)

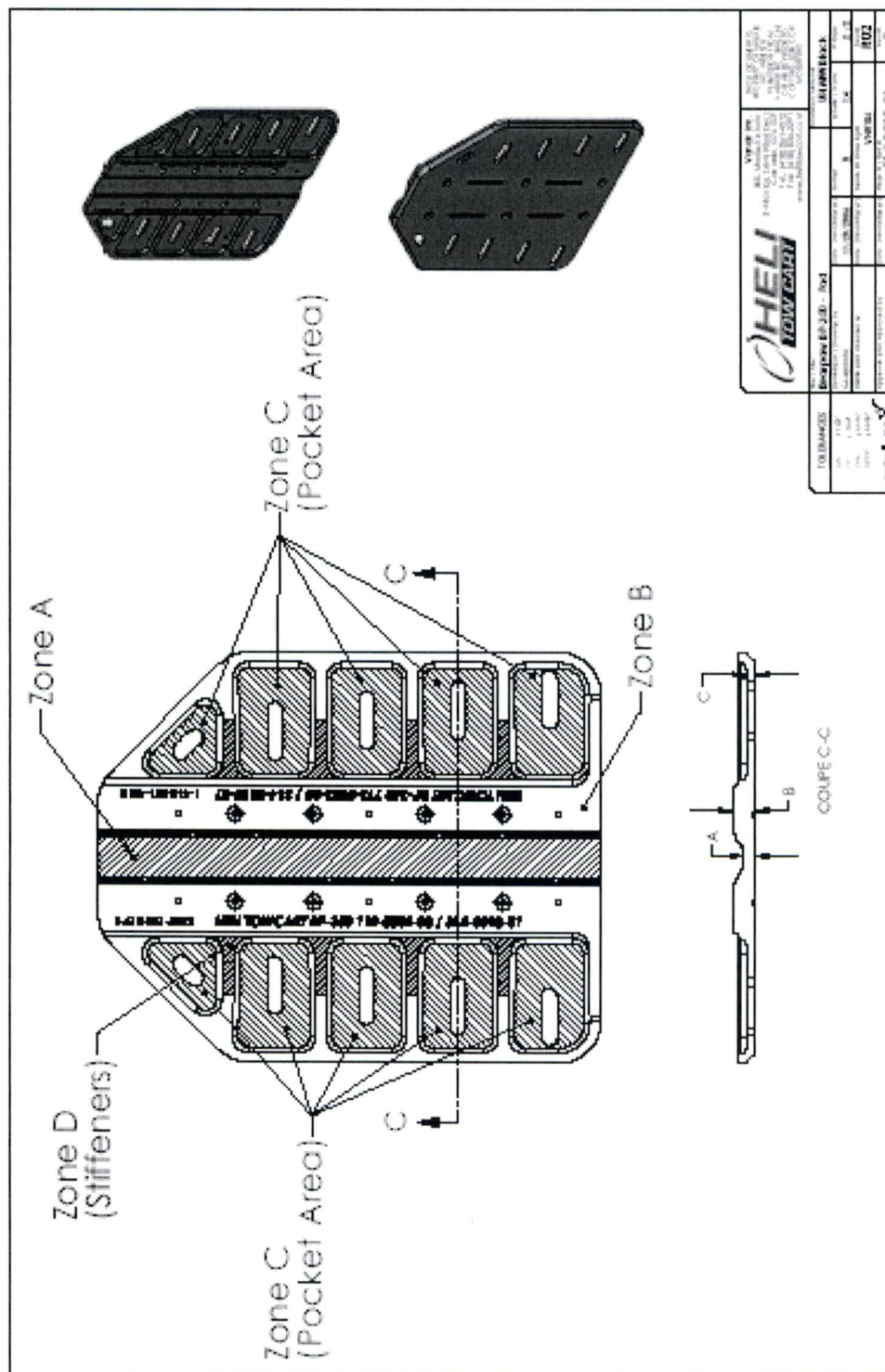


ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE
1	3	314-0019-15	U SHAPED CUP	STEEL		
2	6	314-0012-C1	FILLER BLOCK	STEEL		1/4
3	6	314-0007-15	SLOTTED CUP SUPPORT	STEEL		
4	4	314-0005-15	ICE BLADE ASSEMBLY	STEEL		1X6 1/4
5	14	252-0001-17	MD20365-42B	STEEL		1/4-28
6	6	251-0001-17	AN4-14A	STEEL		1/4-28 UNF
7	20	253-0001-17	AN960-416	STEEL		1/4
8	1	314-0018-C1-S	PAD STREAM LINE	POLYETHYLENE UHMW	BLACK	1
9	1	314-0021-C1	SHRINK			

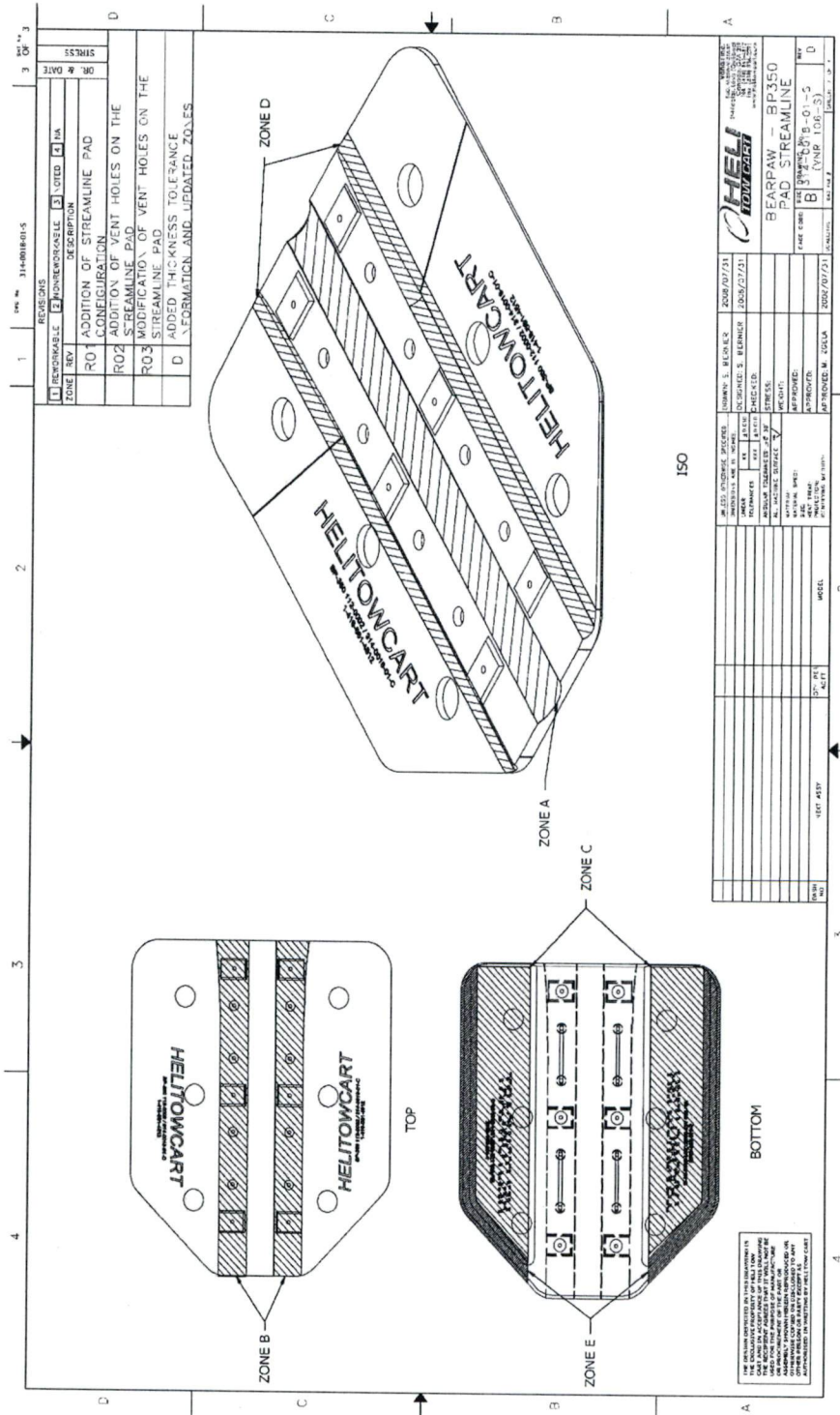
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE
1	3	314-0019-15	U SHAPED CUP	STEEL		
2	6	314-0012-C1	FILLER BLOCK	STEEL		1/4
3	6	314-0007-15	SLOTTED CUP SUPPORT	STEEL		
4	4	314-0005-15	ICE BLADE ASSEMBLY	STEEL		1X6 1/4
5	14	252-0001-17	MD20365-42B	STEEL		1/4-28
6	6	251-0001-17	AN4-14A	STEEL		1/4-28 UNF
7	20	253-0001-17	AN960-416	STEEL		1/4
8	1	314-0018-C1-S	PAD STREAM LINE	POLYETHYLENE UHMW	BLACK	1
9	1	314-0021-C1	SHRINK			

THE DESIGN DEPICTED IN THIS DRAWING IS THE EXCLUSIVE PROPERTY OF HELI TOW CART AND IN ACCEPTANCE OF THIS DRAWING THE RECIPIENT AGREES THAT IT WILL NOT BE USED FOR THE PURPOSE OF REPRODUCING OR PROMOTING THE PART OR ASSEMBLY KNOWN HEREIN REPRODUCED OR OTHERWISE COPIED OR DISCLOSED TO ANY OTHER PERSON OR PARTY EXCEPT AS AUTHORIZED IN WRITING BY HELI TOW CART

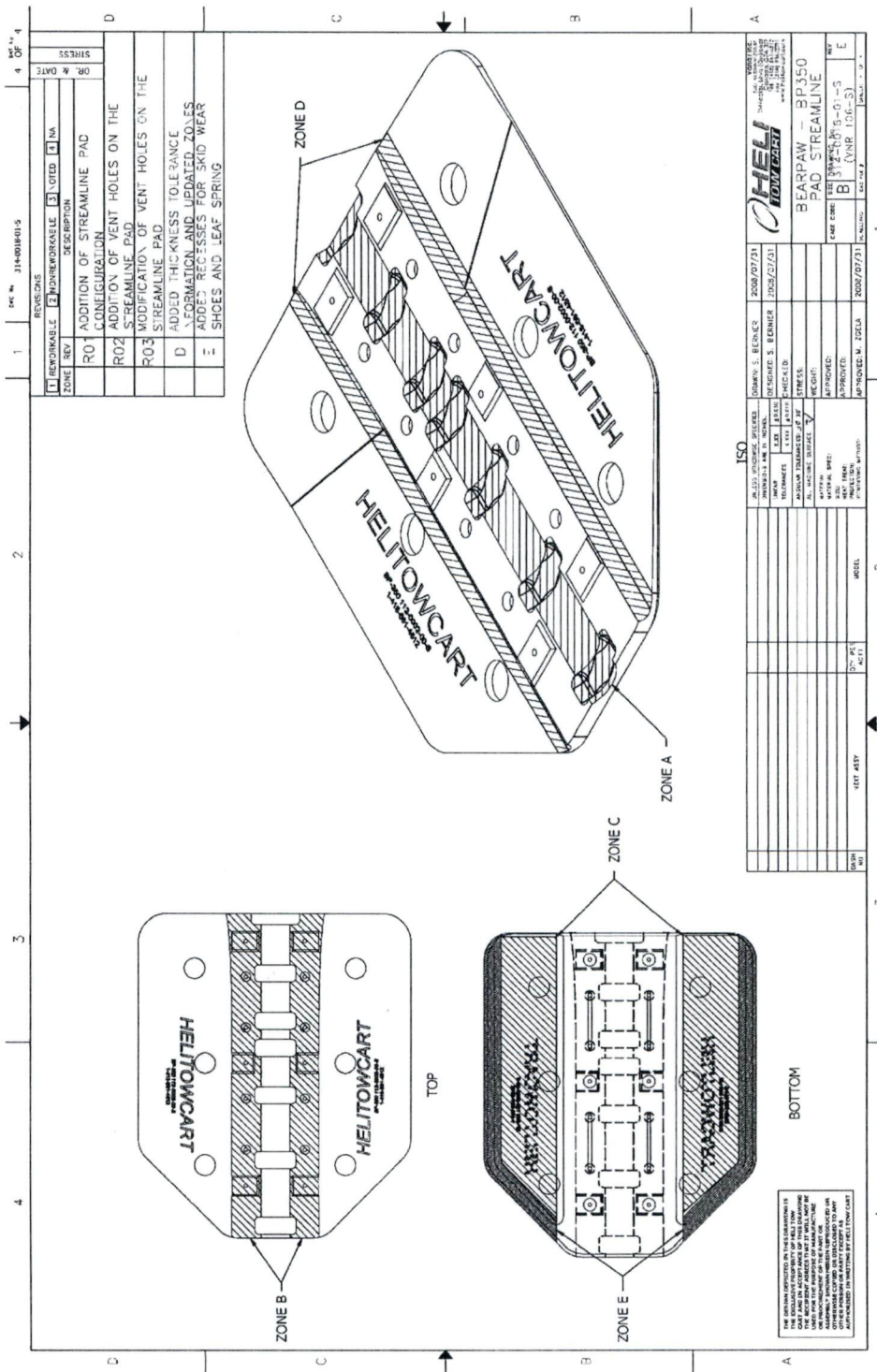
Annex B – Tolerance Zones for Cracks and Wear



Streamline Pad w/o Recesses – Dwg 314-0018-01 (VNR106-S) Rev A to D



Streamline Pad with Recesses – Dwg 314-0018-01 (VNR106-S) Rev E



4

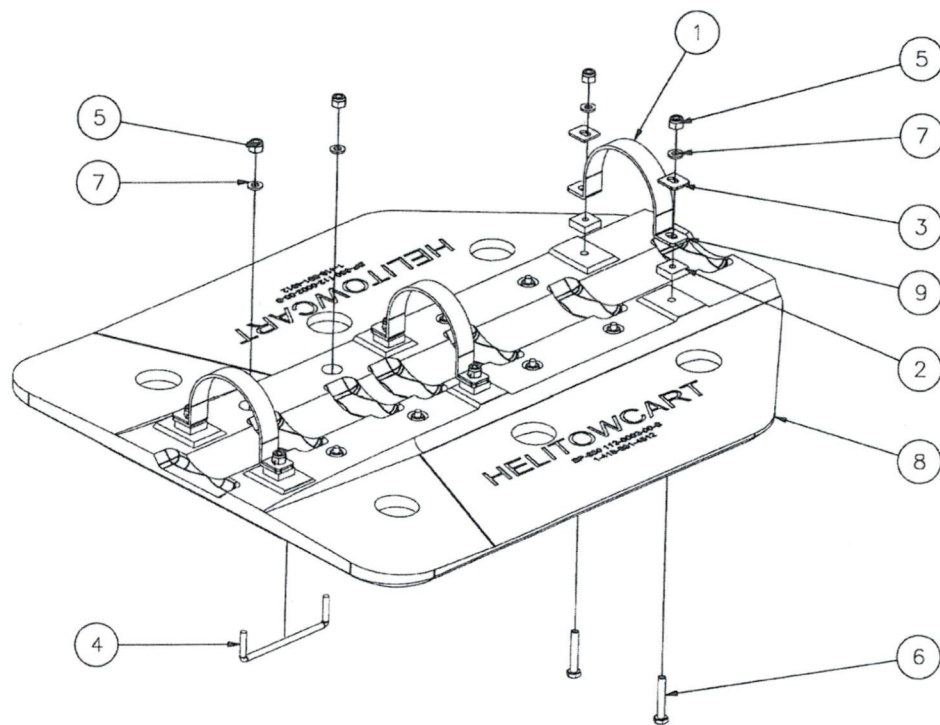
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1

112-0002-00-5

1 OF 1



REVISIONS			
1	2	3	4
REWORKABLE	NONREWORKABLE	NOTED	NA
ZONE	REV	DESCRIPTION	
A		ADDITION OF STREAMLINE PAD CONFIGURATION	
B		ADDITION OF VENT HOLES ON THE STREAMLINE PAD	
C		MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD	
D		DELETED REVISIONS IDENTIFICATION IN PART NUMBER	
E		ADDED RECESSES FOR SKID WEAR SHOES AND LEAF SPRING	

NOTE: ICEBLADE ASSEMBLY, ITEM4,
CAN BE OMITED FROM INSTALLATION
(OPTIONAL)

1	3	314-0019-15	U SHAPED CLIP	STEEL		
2	6	314-0012-01	FILLER BLOCK	STEEL		1/4
3	6	314-0007-15	SLOTTED CLIP SUPPORT	STEEL		
4	4	314-0005-15	ICE BLADE ASSEMBLY	STEEL		1X6 1/4
5	14	262-0001-17	MD20365-42B	STEEL		1/4-28
6	6	261-0001-17	AN4-14A	STEEL		1/4-28 UNF
7	20	263-0001-17	AN960-416	STEEL		1/4
8	1	314-0018-01-S	PAD STREAM LINE	POLYETHYLENE UHMW	BLACK	1
9	1	314-0021-01	SHRINK			
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE

THE DESIGN DEPICTED IN THIS DRAWING IS THE EXCLUSIVE PROPERTY OF HELI TOW CART AND IN ACCEPTANCE OF THIS DRAWING THE RECIPIENT AGREES THAT IT WILL NOT BE USED FOR THE PURPOSE OF MANUFACTURE OR PROCUREMENT OF THE PART OR ASSEMBLY SHOWN HEREIN REPRODUCED OR OTHERWISE COPIED OR DISCLOSED TO ANY OTHER PERSON OR PARTY EXCEPT AS AUTHORIZED IN WRITING BY HELI TOW CART

Assy Doc

UNLESS OTHERWISE SPECIFIED		DRAWN: S. BERNER 2008/07/31	
DIMENSIONS ARE IN INCHES		DESIGNED: S. BERNER 2008/07/31	
UNLESS OTHERWISE SPECIFIED	XX ±0.030	CHECKED:	
TOLERANCES	ANY ±0.010	STRESS:	
ANGULAR TOLERANCES: J & J 30°		WEIGHT:	
ALL MACHINE SURFACE: √		APPROVED:	
MATERIAL:		APPROVED: M. ZGELA 2008/07/31	
MATERIAL SPEC:		SCALE: NTS	
SIZE:		CND TOL E 112-0002-00-5 Rev D 07/31/08	
HEAT TREAT:		CND TOL E 112-0002-00-5 Rev D 07/31/08	
PROTECTION:		CND TOL E 112-0002-00-5 Rev D 07/31/08	
IDENTIFYING METHOD:		CND TOL E 112-0002-00-5 Rev D 07/31/08	

HELI TOW CART
Vancouver Inc.
112-0002-00-5 Rev D 07/31/08
CND TOL E 112-0002-00-5 Rev D 07/31/08

**BEARPAW - BP350
ASSEMBLY STREAMLINE**

DRAWING NO. 112-0002-00-5
REV E



Transports
Canada

Transport
Canada

TC-APP'D
MANUFACTURER
CERTIF

Certificate of Approval

This is to certify that

LES ENTREPRISES HÉLITOWCART (VANAIR INC.)

whose place of business is located at

877A Alphonse-Desrochers, SAINT-NICOLAS, LÉVIS, QC

Approved Organization

27-06

is approved pursuant to CAR 561 for the
MANUFACTURE and CERTIFICATION of:

Aeronautical Products

specified in the respective Approval Limitation Records
that accompany this certificate

Signed: _____

Sebastien Lachapelle
For the Minister of Transport

Dated: 2008-11-24

Supersedes certificate dated: 2007-12-01

This Certificate is not transferable. The approval is
valid until surrendered, suspended or canceled.

Canada



Transport
Canada

Transports
Canada

Certificat d'agrément

Nous certifions que l'organisme

LES ENTREPRISES HÉLITOWCART (VANAIR INC.)

dont le lieu d'affaires se trouve à

877A Alphonse-Desrochers, SAINT-NICOLAS, LÉVIS, QC

Organisme agréé

27-06

est agréé en vertu de la sous-partie 561 du RAC, en ce qui a trait à la

CONSTRUCTION et la **CERTIFICATION** de:

Produits aéronautiques

tel qu'il est spécifié dans la fiche de restriction d'agrément qui accompagne ce certificat.

Signature: _____

Sebastien Lachapelle
Pour le ministre des Transports

Date: 2008-11-24

Remplace le certificat daté du: 2007-12-01

Ce certificat est incessible. L'agrément est valide jusqu'à son abandon, sa suspension ou son annulation.

Canada



Transports
Canada

Transport
Canada

Approval Limitation Record
– Aeronautical Product –
– Sub Assemblies and Parts –

LES ENTREPRISES HÉLITOWCART (VANAIR INC.)

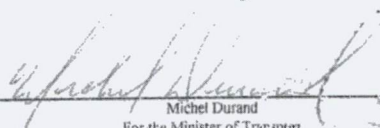
the holder of Certificate of Approval Number: **27-06**

is limited to the manufacture and certification of the following Aeronautical Products :

Product	Model / Part Number	Approval Number	Effective Date
BEARPAW	HTC-MDL-BP-R44-1000	STC SH06-24, ISSUE NO: 3	2007-02-13
	HTC-MDL-BP-AS350/355-1000		
	HTC-MDL-BP-EC130-1000		
EXTERNAL POWER RECEPTACLE	HTC-MDL-EGPR-R44-115	STC SH11-46 ISSUE NO:1	2012-03-27

Issued: 2012-03-27

Signed:


Michel Durand
For the Minister of Transport

Supersedes certificate dated: 2007-02-13

Canada



Transports
Canada

Transport
Canada

Fiche de restriction d'agrément

- Produit aéronautique –
- Sous-ensembles et pièces –

LES ENTREPRISES HÉLITOWCART (VANAIR INC.)

Le titulaire du certificat d'agrément n°: 27-06

peut construire et certifier uniquement les produits aéronautiques énumérés ci-dessous :

Produit	Modèle / Pièce n°	N° d'homologation	Mise en vigueur
BEARPAW	HTC-MDL-BP-R44-1000	STC SH06-24, ISSUE NO; 3	2007-02-13
	HTC-MDL-BP-AS350/355-1000		
	HTC-MDL-BP-EC130-1000		
EXTERNAL POWER RECEPTACLE	HTC-MDL-EGPR-R44-115	STC SH11-46 ISSUE NO:1	2012-03-27

Délivré: 2012-03-27

Signature: _____

Michel Durand
Pour le ministre des Transports

Remplace le certificat daté du: 2007-02-13

Canada

United States of America
Department of Transportation -- Federal Aviation Administration

Supplemental Type Certificate

IMPORT

Number SR02432NY

JS - STC

This certificate issued to

Helitowcart (Vanair Inc.)
877A, Alphonse-Desrochers
Saint-Nicholas, Lévis, Québec
Canada G7A 5K6

certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of * of the * Regulations.

Original Product -- Type Certificate Number: *

Make: *

Model: *

* See attached FAA Approved Model List (AML) No. SR02432NY for the list of approved aircraft models, applicable airworthiness regulations, and required documents.

Description of Type Design Change:

1. Installation of Helitowcart Bear Paw Models BP350, BP44 or BP130 in accordance with Helitowcart Master Document Lists as specified in AML SR02432NY.
2. Instructions for Continued Airworthiness documents as specified in AML SR02432NY are required with this installation.

Limitations and Conditions:

1. A copy of this certificate and FAA AML No. SR02432NY must be maintained as part of the permanent records of this modified aircraft.
2. The Installer must determine whether this design change is compatible with previously approved modifications.
3. If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration

Date of application: March 26, 2007

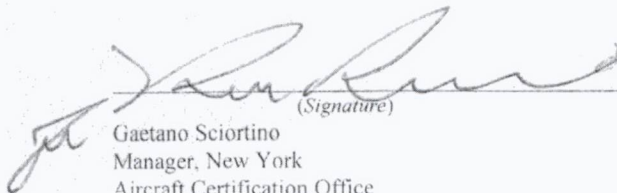
Date reissued:

Date of issuance: July 20, 2007

Date amended: January 14, 2013, June 3, 2014



By direction of the Administrator


(Signature)
Gaetano Sciortino
Manager, New York
Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

FAA APPROVED MODEL LIST (AML) NO. SR02432NY
HELITOWCART (VANAIR, INC.)
FOR
INSTALLATION OF BEAR PAWS

Original Issue Date: July 20, 2007
Amended Date: June 3, 2014


PART	REGULATION	MAKE	MODEL	TCDS	REQUIRED DOCUMENTATION			AML AMENDMENT DATE
					MASTER DOCUMENT LIST	INSTALLATION INSTRUCTIONS	INSTRUCTIONS for CONTINUED AIRWORTHINESS	
27	Federal Aviation	Airbus Helicopters	AS350B, B1, B2, B3, BA, D, D1	H9EU	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- AS350/355-1000 Rev. G, approved on December 21, 2012 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - AS350/355, Bear Paw Model BP350, document no. 314-0020-00-E, Rev. F, approved on December 21, 2012 or later Transport Canada approved revision.	Contained within Installation Instructions, page 8 of document no. 314- 0200-00-E, Revision F.	June 3, 2014
27	Federal Aviation	Airbus Helicopters	EC 130B4	H9EU	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- EC130-1000 Rev A, approved on May 13, 2011 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - EC130, Bear Paw Model BP130, document no. 314- 0031-00-A, Rev. A, approved May 4, 2011 or later Transport Canada approved revision	Contained within Installation Instructions, page 6 of document no. 314- 0031-00-A, Revision A.	June 3, 2014
27	Federal Aviation	Airbus Helicopters	AS355E, F, F1, F2, N	H11EU	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- AS350/355-1000 Rev. G, approved on December 21, 2012 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - AS350/355, Bear Paw Model BP350, document no. 314-0020-00-E, Rev. F, approved on December 21, 2012 or later Transport Canada approved revision.	Contained within Installation Instructions, page 8 of document no. 314- 0200-00-E, Revision F.	June 3, 2014
27	Federal Aviation	Robinson Helicopter Company	R44, R44 II	H11NM	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- R44-1000 Rev. D, approved on August 28, 2013 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - R44/R66, Bear Paw Model BP44, document no. 314-0011-00, Rev. E, approved on August 9, 2013 or later Transport Canada approved revision.	Contained within Installation Instructions, page 6 of document no. 314- 0011-00, Rev. E.	June 3, 2014

FAA APPROVED MODEL LIST (AML) NO. SR02432NY
HELITOWCART (VANAIR, INC.)
FOR
INSTALLATION OF BEAR PAWS

Original Issue Date: July 20, 2007
Amended Date: June 3, 2014

PART	REGULATION	MAKE	MODEL	TCDS	REQUIRED DOCUMENTATION			AML AMENDMENT DATE
					MASTER DOCUMENT LIST	INSTALLATION INSTRUCTIONS	INSTRUCTIONS for CONTINUED AIRWORTHINESS	
27	Federal Aviation	Robinson Helicopter Company	R66	R00015LA	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- R44-1000 Rev. D, approved on August 28, 2013 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - R44/R66, Bear Paw Model BP44, document no. 314-0011-00, Rev. E, approved on August 9, 2013 or later Transport Canada approved revision.	Contained within Installation Instructions, page 6 of document no. 314- 0011-00, Rev. E.	June 3, 2014

FAA Approved: _____

 Gaetano Sciortino
Manager, New York
Aircraft Certification Office



Department of Transport

Supplemental Type Certificate

SAP. STC

This approval is issued to:

Helitowcart (Vanair Inc.)
877A, Alphonse-Desrochers
St-Nicholas, Lévis, Québec
Canada G7A 5K6

Number: SH06-24

Issue No.: 4

Approval Date: August 17, 2006

Issue Date: October 10, 2013

Responsible Office:

Québec

Aircraft/Engine Type or Model:

See Continuation Sheet on Page 2 of 2

Canadian Type Certificate or Equivalent:

See Continuation Sheet on Page 2 of 2

Description of Type Design Change:

Installation of Helitowcart BearPaw

**Installation/Operating Data,
Required Equipment and Limitations:**

For the Robinson Models R44, R44 II and R66 Helicopters:

Installation of Helitowcart Bear Paw BP44 is to be performed in accordance with TC approved Helitowcart Master Document List Report: HTC-MDL-BP-R44-1000, Revision D dated August 28, 2013, or later Transport Canada approved revision.

The BearPaw must be installed in accordance with Helitowcart Document: 314-0011-00, BearPaw Model BP44, Installation Instructions - R44/R66, Revision E dated August 09, 2013 or later Transport Canada approved revision.

See Continuation Sheet Page 2 of 2



Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.


Jean Pierre Francoeur
For Minister of Transport

Canada



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

**Installation/Operating Data,
Required Equipment and Limitations (Cont'd):**

For the Eurocopter (formerly Aerospatiale) AS350 and AS355 Series Helicopters:

Installation of Helitowcart Bear Paw BP350 is to be performed in accordance with TC approved Helitowcart Master Document List Report: HTC-MDL-BP-AS350/355-1000, Revision F dated April 8, 2010, or later Transport Canada approved revision.

The BearPaw must be installed in accordance with Helitowcart Document: 314-0020-00-E, BearPaw Model BP350, Installation Instructions – AS350/355, Revision F dated December 21, 2012 or later Transport Canada approved revision.

For the Eurocopter EC 130 Helicopters:

Installation of Helitowcart Bear Paw BP130 is to be performed in accordance with TC approved Helitowcart Master Document List Report: HTC-MDL-BP-EC130-1000, Revision A dated May 13, 2011, or later Transport Canada approved revision.

The BearPaw must be installed in accordance with Helitowcart Document: 314-0031-00-A, BearPaw Model BP130, Installation Instructions – EC130, Revision A dated May 04, 2011 or later Transport Canada approved revision.

Fleet Eligibility List		
Make	Model	Type Certificate Data Sheet
Robinson	R44	H-97
Robinson	R44 II	H-97
Robinson	R66	H-111
Eurocopter	AS 350 B	H-83
Eurocopter	AS 350 B1	H-83
Eurocopter	AS 350 B2	H-83
Eurocopter	AS 350 B3	H-83
Eurocopter	AS 350 BA	H-83
Eurocopter	AS 350 D	H-83
Eurocopter	EC 130 B4	H-83
Eurocopter	AS 355 E	H-87
Eurocopter	AS 355 F	H-87
Eurocopter	AS 355 F1	H-87
Eurocopter	AS 355 F2	H-87
Eurocopter	AS 355 N	H-87

– End –

Traceability data

Qty	Part No.	Desc:	Lot number
34	112 0002 00 S-C	BP350 NB STREAMLINED	HTC-LNF- 141114 - 01 HTC-LNF-yymmdd-seq
Includes:			
	SEE ATTACHED EXCEL CHART		LN-
			LN-
			LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100 %	PRESENCE OF ICEBADES IN BAGS (EACH)	
B	100 %	" " DOCUMENTS IN BAGS	
C	100 %	ALL LN MATCH PARTS FOR LOT	
D	100 %	" COMPONENTS INTO BAGS	
E	100 %	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: N. BANBEAU			Date: 2014 11 14

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2014 11 14	34 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	2 PAIRS WITH ESTHETIC IRREGULARITIES ACCEPTED BY DEROGATION / NB SEE ATTACHED PICTURES

Release certificates issue

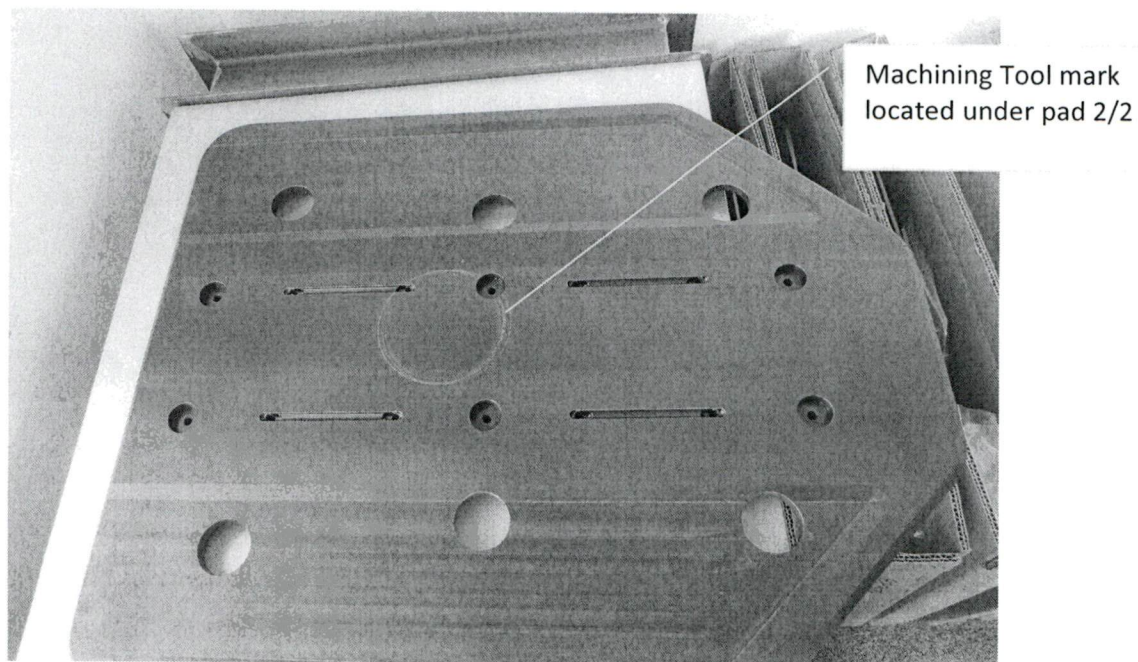
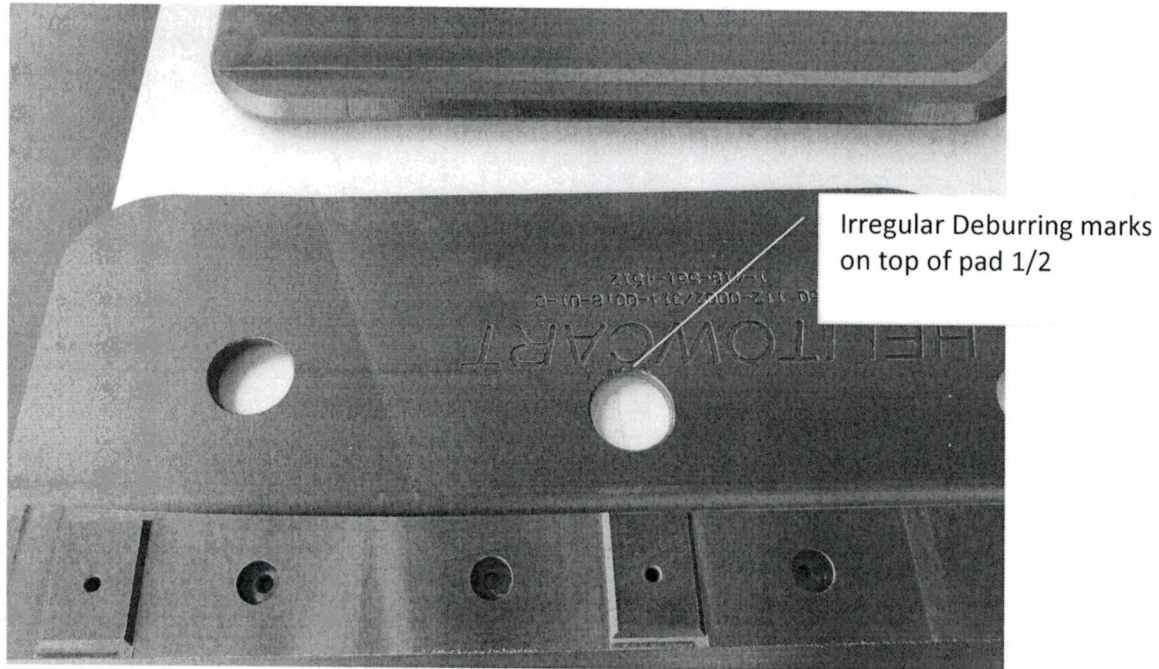
Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: N. Banbeau	Date: 2014 11 14
Comments:		
HTC-LNF- 141114 - 01 TO 34		

Helitowcart Bearpaws BP350

Object: **Esthetic Irregularities** / Pair ID number: LNF-141114-34

Irregularities on surface have no impact on product performance.

Accepted by Derogation by Nathalie Barbeau, Quality Director, Helitowcart. 2014 11 14.



Master Document List

Helitowcart

Eurocopter Model AS 350/355 Series Helicopters Installation of BearPaw Model BP350

Report: HTC-MDL-BP-AS350/355-1000 (Rev G)

APPROVED BY:



DATE: DECEMBER 21, 2012

Mirko Zgela
Design Approval Representative DAR #310

Revision	Revision Date	Revision of Entry	Entered by
A	Nov 22, 2006	Initial issue	N/A
B	Jan 28, 2007	Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
C	Feb 28, 2007	Addition of streamline pad configuration. Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
D	July 27, 2008	Addition of vents holes in the streamline pad.	M.Z.
E	Aug 01, 2008	Modification of vents holes in the streamline pad.	M.Z.
F	April 8, 2010	Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
G	December 21, 2012	Updated Tolerance data regarding Pad and Updated referenced document identification and revisions	M.Z.

*minor changes following ECO # 5
changes to prod. tolerances of pad to reject less parts uselessly.*

Tel 1-418-561-4512, Fax: 1-418-836-2291, info@helitowcart.com www.helitowcart.com
860 Marie-Victorin, Saint-Nicolas, Levis, Quebec, Canada, G7A 3S9

Page 1/3
*D. Boileau
2017 06 01*

1.0 MASTER DOCUMENTS

Document #	Title	Revision Status	Approval by	Date
AAC-CPL-BP-AS350/355-1000	Compliance Plan – Eurocopter Model AS350/355 Series Helicopters – Installation of BearPaw Model BP350	NC	DAR 310	Nov 22, 2006
HTC-314-0020-00-E	BearPaw Model BP350 – Installation Instruction – AS350/355 Series Helicopters	F	DAR 310	Dec 21, 2012
AAC-STR-BP-AS350/355-1000	Structural Substantiation – Helitowcart Inc. BearPaw Model BP350	NC	DAR 310	Nov 20, 2006
AAC-FTR-C-GZNC	Simple External Modification – Applicant's Flight Test Plan/Report	NC	DAR 310	Nov 21, 2006
HTS-EO-0709-002	Bear Paw Model BP350 Vent Holes	A	DAR 310	July 31, 2008
HTC-MEM-0709-001	Memorandum – Vent Hole BP350 BearPaw	A	DAR 310	July 31, 2008

2.0 MASTER DRAWINGS

Drawings #	Title	Revision Status	Approval by	Date
112-0002-00	BearPaw BP350 - Assembly	B	DAR 310	Nov 20, 2006
112-0002-00-S	BearPaw BP350 – Assembly Streamline	D	DAR 310	Dec 21, 2012
314-0002-15 (VNR084)	BearPaw – Iceblade	A (R01)	DAR 310	Apr 24, 2006
314-0004-15 (VNR085)	BearPaw – Iceblade Threaded Rod	A (R01)	DAR 310	Apr 24, 2006
314-0005-15 (VNR086)	BearPaw – Iceblade Assembly	A (R01)	DAR 310	Apr 24, 2006
314-0007-15 (VNR089)	Bearpaw – Slotted Clip Support	B (R04)	DAR 310	July 31, 2006
314-0012-01 (VNR099)	Filler Block ¼"	A (R01)	DAR 310	Aug 8, 2006
314-0018-01 (VNR106)	BearPaw BP350 - Pad	B (R02)	DAR 310	Sept 26, 2006
314-0018-01-S (VNR106-S)	BearPaw BP350 – Pad Streamline	D	DAR 310	Dec 21, 2012
314-0019-15 (VNR107)	BearPaw BP350 – U Shaped Clip	A (R01)	DAR 310	Sept 29, 2006

3.0 REFERENCE DOCUMENTS

Document #	Title	Revision Status	Approval by	Date
314-0009-01	Ultra High Molecular Weight Polyethylene – Typical Properties	A	N/A	May 24, 2006
314-0008-01	Material Properties - UHMW TIVAR	A	N/A	May 24, 2006
314-0017-05	Heat Shrink Specifications	A	N/A	Sept 6, 2006

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REVISIONS & APPROVAL	p.10
Annex A (BearPaw Assembly Drawing)	
Annex B (BearPaw Pad Drawing)	

INTRODUCTION

Scope

This installation instruction describes the step-by-step approach to install and to perform maintenance of the Helitowcart BearPaw Model BP 350 (P/N 112-0002-00 or P/N 112-0002-00-S) for the AS 350 and AS 355 series helicopters.

General

The Helitowcart BearPaw is made of machined UHMW TIVAR® polymer sheet. This material combines high-impact performance, low friction and good resistance to chemical. Its high durability will provide superior performance when installed on your helicopter. Any question regarding the Helitowcart BearPaw system shall be directed to Helitowcart Customer Support as indicated in Table (1):

Table 1 – Helitowcart Customer Support

Care of	Mailing Address	Phone, Fax & Email:
Customer Support Helitowcart BearPaw Helitowcart (Vanair inc)	860 Marie-Victorin St-Nicholas, Levis, Quebec, Canada, G7A 3S9	Tel:1 (418) 561-4512 Fax:1 (418) 836-4575 info@helitowcart.com

Helicopter Effectivity

This installation instruction applies to the following helicopter models:

Table 2 – Helicopter Model Effectivity

Make	Model	Transport Canada Type Certificate Data Sheet
Eurocopter	AS 350 D	H-83
Eurocopter	AS 350 D1	
Eurocopter	AS 350 B	
Eurocopter	AS 350 B1	
Eurocopter	AS 350 B2	
Eurocopter	AS 350 B3	
Eurocopter	AS 350 BA	H-87
Eurocopter	AS 355 E	
Eurocopter	AS 355 F	
Eurocopter	AS 355 F1	
Eurocopter	AS 355 F2	
Eurocopter	AS 355 N	

Installer Responsibilities

The installer shall ensure that the installation of the Helitowcart BearPaw does not conflict with any other part of the helicopter configuration. Technicians performing this installation should be familiar with A/C work and should have been familiarized with the different Helitowcart BearPaw system components prior to performing a first time installation. All steps in this procedure must be followed. Deviations from the procedures may result in potential structural failure or equipment malfunction and will result in a non-compliant installation.

INSTALLATION**BearPaw Installation**

Reference Documentation:

- [1] Helicopter Maintenance Manual AS 350 or AS 355 as applicable.

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] as applicable to your helicopter model to allow a ground clearance of the skid in the area of the aft cross tube of approximately 1 ½" (38mm);

Note: The BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) can be installed with or without the skid tube wear shoes.

Step 2: IceBlade Installation

Note: The BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) can be installed with or without the IceBlades

- With IceBlade Option
- Install ice blades (Qty: 4) (Iceblades P/N 314-0005-15) under BearPaw pad as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A.
- Secure ice blades with washer (Washer P/N 263-0001-17) and nut (P/N 262-0001-17).

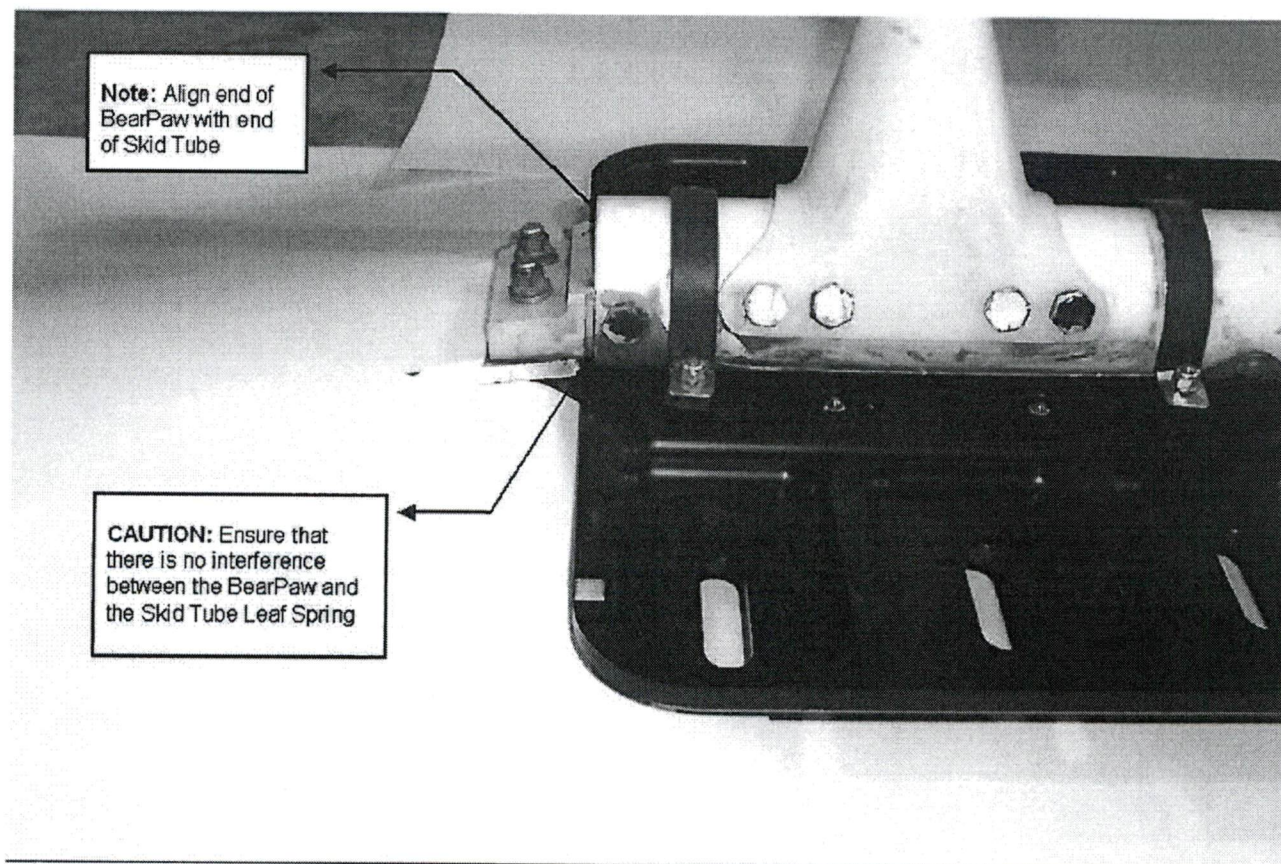
Step 3: BearPaw Installation

- Position the BearPaw under the skid as shown in Figure 1 with narrow edge pointing forward.
- Insert washers (P/N 263-0001-17) through all six bolts: 6x(261-0001-17);
- Insert bolts (P/N 261-0001-17) and washer (Washer P/N 263-0001-17) through BearPaw pad as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A;
- Insert filler blocks (P/N314-0012-01) as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A;

Note: The use of filler blocks (P/N314-0012-01) may be replaced or complemented by the use of washers (P/N 263-0001-17) to fill in the gap. Bolts (P/N 261-0001-17) may be replaced by longer or shorter AN4 bolts as required.

- Insert both U-shaped clips (P/N 314-0019-15) through bolts: 6x(261-0001-17);
- Insert slotted clip supports (P/N 314-0007-15) through all six bolts. Position slotted clip supports with rounded edge toward helicopter skid;
- Insert washer (P/N 263-0001-17) & screw nuts (P/N 262-0001-17) for a tight fit. Max. torque on nuts 60 in.-lb;
- Remove helicopter from lift;
- Amend Weight & Balance records as required using data provided in Table 3.

Figure 1 – BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) - Alignment on Skid



BearPaw Removal

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] to allow a clearance of the skid in the area of the aft cross tube of approximately 1 ½" (38mm);

Step 2: BearPaw Removal

- Remove nuts (P/N 262-0001-17), slotted clip support (P/N 314-0007-15) on U-shaped clips (P/N 314-0019-15),
- Remove washers (P/N 263-0001-17), U-shaped clips (P/N 314-0019-15), filler blocks (P/N 314-0012-01), and remove BearPaw pad (P/N 314-0018-01) or (P/N 314-0018-01-S Streamline);
- Inspect skid tubes to confirm serviceability
- If the skid tube shoes have been removed, re-install shoes as per reference [1];
- Complete installation by putting helicopter back to normal position by removing lift status;
- Amend Weight & Balance records as required using data provided in Table 3.

Weight & Balance

The following information should be used to amend the helicopter weight and balance information following the installation or removal:

Table 3 – Weight & Balance Data

Item	Weight	Lateral		Longitudinal	
		Arm	Moment	Arm	Moment
Helitowcart BearPaw Model BP350 (P/N 112-0002-00)	19,9 Lb 9,0 Kg	N/A	N/A	159,4 in. 404.9 cm	3172.0 in-lb 36.44 m-kG
Helitowcart BearPaw Model BP350 - <u>Streamline</u> (P/N 112-0002-00-S)	18,3 Lb 8,5 Kg	N/A	N/A	159,4 in. 404.9 cm	2917.0 in-lb 34.41 m-kG

Note: Weight and moment provided are for full kit installation.

Parts Lists

The Helitowcart BearPaw detailed parts list is as follow:

Table 4 – Parts List

Description	Qty	Part / Dwg No.	Additional Drawing Reference No./ Name
BearPaw Model BP350	1	112-0002-00	112-0002-00 / BearPaw Assembly, or 112-0002-00-S /Bear Paw Streamline Assembly
BearPaw pad ⁽¹⁾	1	314-0018-01	BearPaw BP350 – Pad (VNR106)
BearPaw pad streamline ⁽¹⁾	1	314-0018-01S	BearPaw BP350 – Pad Streamline (VNR106-S)
U Shaped Clips	3	314-0019-15	BearPaw BP350 - U Shaped Clips (VNR107)
Slotted Clip Support	6	314-0007-15	BearPaw - Slotted Clip Support (VNR089)
Filler blocks 1/4"	6	314-0012-01	BearPaw – Filler block 1/4" (VNR099)
Bolts	6	261-0001-17	Bolt- AN4-14
Nuts	6	262-0001-17	Nut- MS20365-428
Washers	12	263-0001-17	Washer – AN960-416
Shrink	3	314-0021-01	BearPaw – Shrink Specifications & Install.(1"x6.25")
IceBlade Option Model OIB	4	314-0005-15	IceBlade Assembly (VNR086)
Nuts	8	262-0001-17	Nut- MS20365-428
Washers	8	263-0001-17	Washer – AN960-416

Note (1): Use pocked shaped BearPaw Pad P/N 314-0018-01 for assembly P/N 112-0002-00. Use streamlined Pad P/N 314-0018-01-S for assembly P/N 112-0002-00-S as applicable.

INSPECTION

Life Limited Items

There are no life limited items for the Helitowcart BearPaw.

Pre-Flight

Before each flight the following items should be inspected:

- Check that attachment bolts are installed and secured,
- Check that BearPaws are free from visible damage,
- If damage is found, verify allowable damage according to:
Tables 5 & 6 – Tolerances for cracks & wear and
Annex B – BearPaw Allowable Damage Drawing 314-0018-01 (VNR-106) page 2 of 2 for Pocket pad
or 314-0018-01-S (VNR106-S) page 3 of 3 for Streamlined Pad.

Periodic Inspection Schedule

- The Helitowcart BearPaw shall be inspected every 500 flying hours or yearly whichever comes first.
- The Helitowcart BearPaw can be inspected concurrently with the helicopter landing gear inspection.
- Recommended tolerance for performance of inspection is +/- 10% of the 500 hours period.
- Following an inspection, subsequent interval shall be adjusted to meet the original schedule from time of inspection. If inspection is performed earlier than the 10% tolerance, then following inspections shall be scheduled not to exceed the above mentioned tolerance.

500 Hour or Yearly Inspection Details

- Remove Helitowcart BearPaw: See Section "BearPaw Removal",
- Inspect all parts for damage & wear. See table & figure below for allowable damage,
- Replace all damaged parts,
- Replace parts worn beyond the tolerances indicated below.
- See Tolerances for cracks & wear:
Tables 5 & 6 – Tolerances for cracks & wear and
Annex B – BearPaw Allowable Damage Drawing 314-0018-01 (VNR-106) page 2 of 2 for Pocket pad
or 314-0018-01-S (VNR106-S) page 3 of 3 for Streamlined Pad.

Table 5 – Tolerances for Cracks & Wear / Pocket Pad 314-0018-01 (VNR 106)

Zone	Nominal Dimension (Inches)	Allowable Damage/Wear (Inches)	Cracks
A	0,50	0,050	
B	1,000	0,250	
C	0,375	0,075	<u>Pockets:</u> Cracks are acceptable in the Helitowcart BearPaw pocket areas to a maximum length of 0,5" provided they are 0,25" away from the stiffener radius change. Stop drill cracks with a 0,125" hole.
D	0,50	0,050	<u>Stiffeners:</u> NO cracks in stiffeners.

Table 6 – Tolerances for Cracks & Wear / Streamline Pad 314-0018-01-S (VNR 106-S)

Zone	Nominal Dimension (Inches)	Allowable Damage/Wear (Inches)	Cracks
A	0,50	0,050	
B	1,000; and 0.88	0,250	
C	0.273 to 0,348 (variable thickness)	0,075	<u>Pockets:</u> Cracks are acceptable in the pocket under the Helitowcart BearPaw to a maximum length of 0,5". Stop drill cracks with a 0,125" hole.
D	0,49 (thickness after radius)	0,075	No cracks in the radius
E	0,38	0,075	No cracks in the BearPaw contour


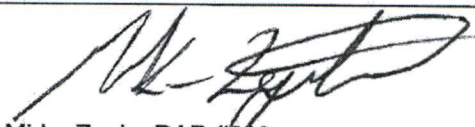
Overhaul Requirements

- Not applicable for the designated application of this device.

REVISIONS & APPROVAL**Revisions**

Date	Rev	Nature of Revisions
Nov 20, 2006	A	Initial issue
Jan 29, 2007	B	Minor editorials. Change to weight & Balance Data to reflect production model. Change in inspection schedule from 300 to 500 hours to match existing landing gear periodicity.
Feb 28, 2008	C	Introduction of new streamline BearPaw Pad configuration as alternate.
Aug 01, 2008	D	Modification of vent holes on the streamline pad
April 8, 2010	E	Correction to C of G data
December 21, 2012	F	Updated Pad Tolerances and Document identifications . Improved page set up for reader convenience.

Approval

Internal Approval :		
Helitowcart inc.	 Lucien Barbeau, President	Date: Dec 21, 2012
External Approval :		
Transport Canada	 Mirko Zgela, DAR #310	Date: Dec 21, 2012

Annex A

See: BearPaw Assembly, drawing no. (112-0002-00) for Pocket style pad or;
BearPaw Assembly, drawing no. (112-0002-00-S) for Streamline style pad

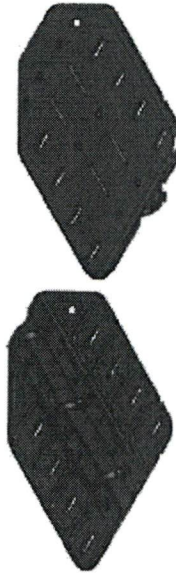
Annex B

See: BearPaw Pad, drawing no. 314-0018-01 (VNR106) page 2 of 2 for Pocket style pad or;
BearPaw Pad, drawing no. 314-0018-01-S (VNR106-S) page 3 of 3 for Streamline style pad.

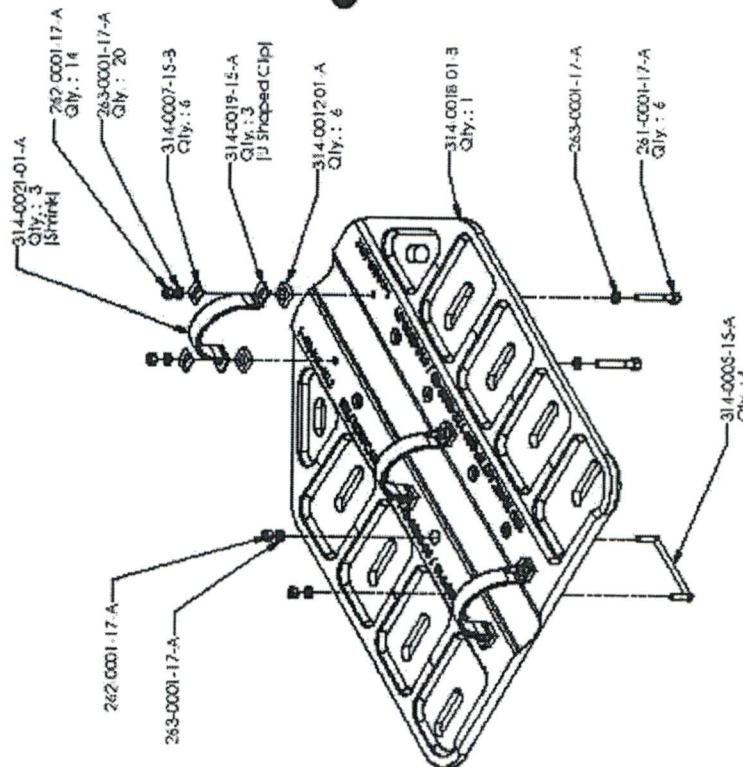
Annex A

BearPaw Assembly, Drawing no. 112-0002-00.

No.	Qty.	Description	Part #	Rev. #
1	1	Bearpaw BP-350 - Pod	314-0018-01	B
2	3	Bearpaw BP-350 - U shaped clip	314-0019-15	A
3	3	Bearpaw BP-350 - Shrink 1" x 6 1/4"	314-0021-01	A
4	6	Bearpaw - Soiled clip support	314-0007-15	B
5	6	Bearpaw - Filter Block 1/4"	314-0012-01	A
6	4	Bearpaw - Iceblade Assembly	314-0005-15	A
7	6	Ball AN4-14A	261-0001-17	A
8	20	Washer AN960-416	263-0001-17	A
9	14	NUT M820365-428	252-0001-17	A



Note : Iceblade assembly can be omitted from installation (Optional)

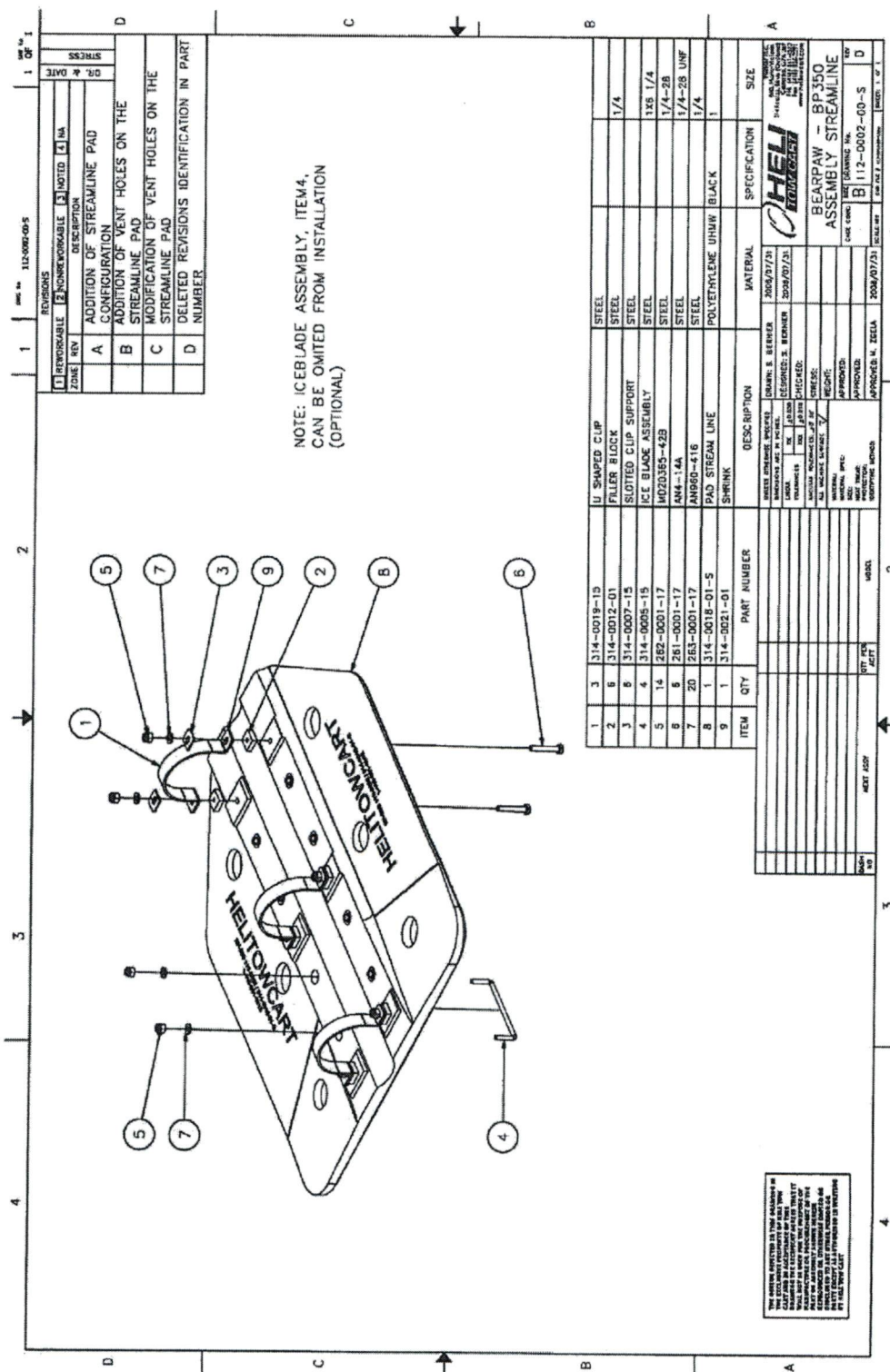


HELI	
Vanair Inc.	
1100785	
112.0002.00	

REV.	DESCRIPTION	DATE	BY
A	Change Ball size	20-09-2005	CEL
B	Final BOM	20-09-2005	CEL
C	Revised BOM	20-09-2005	CEL

Annex A

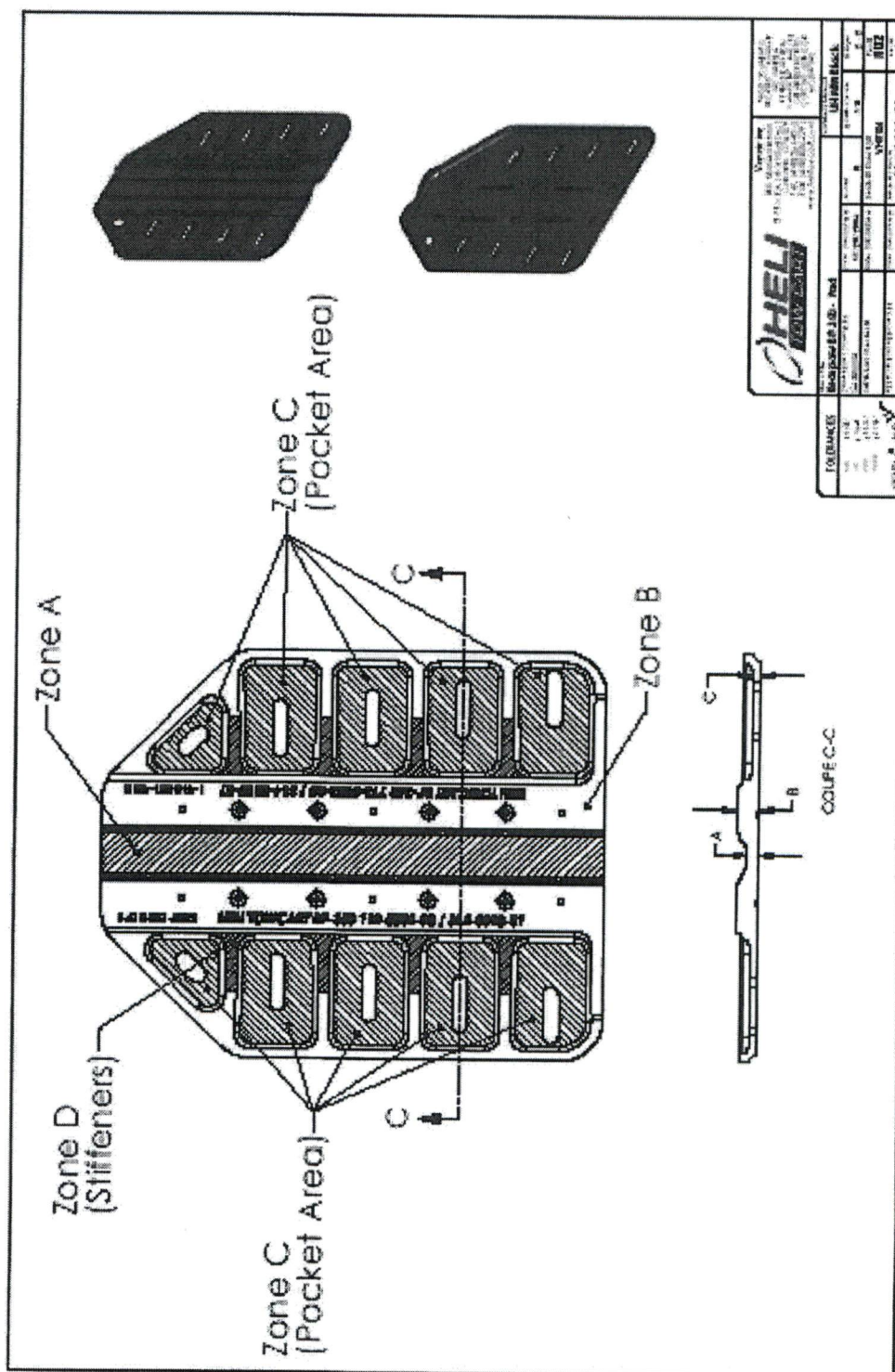
BearPaw Assembly, Drawing no. P/N 112-0002-00-S.





Annex B

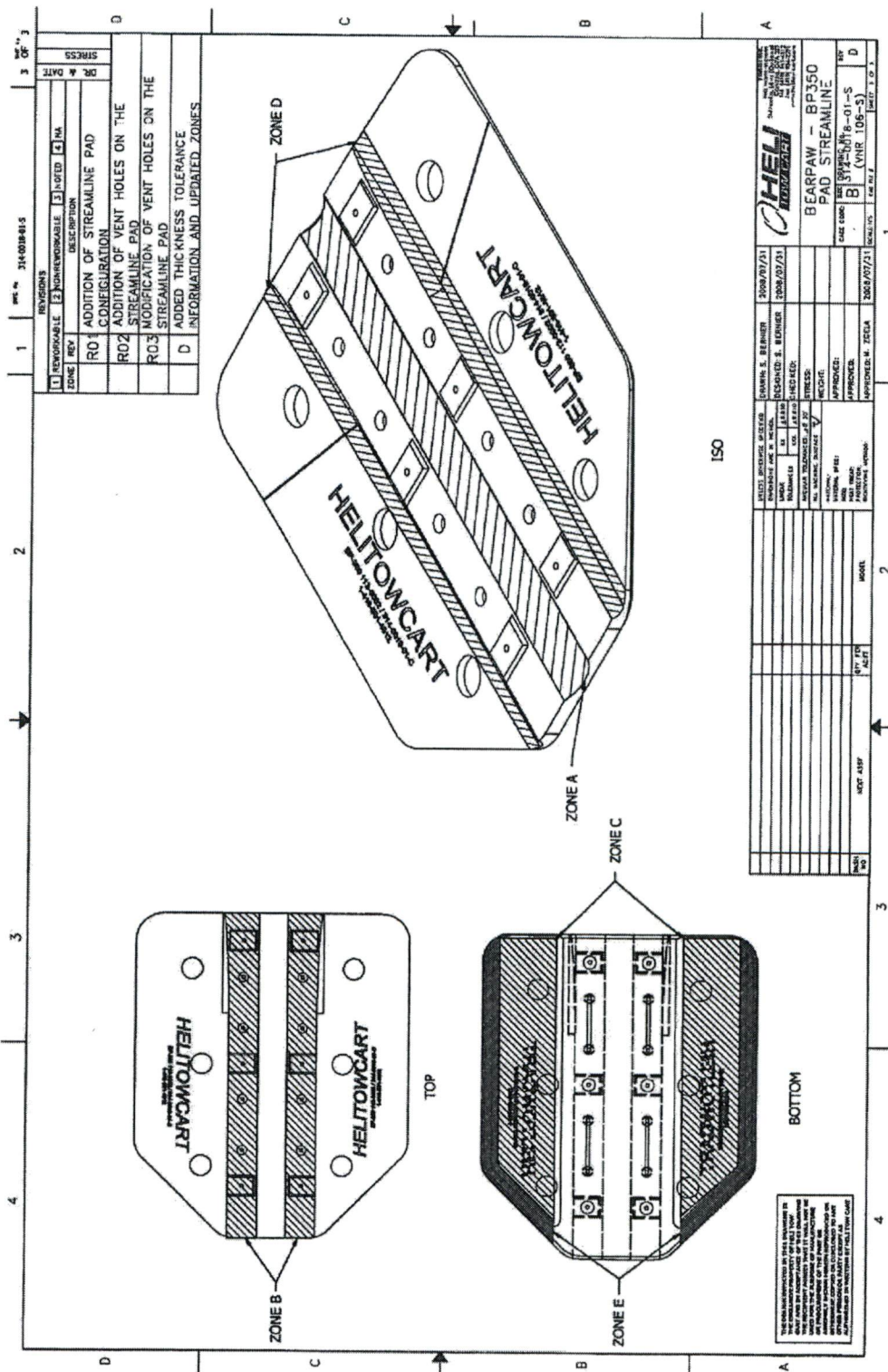
BearPaw Pad, Drawing no. 314-0018-01 (VNR106) Page 2 of 2 Pocket Style Pad.





Annex B

BearPaw Pad, Drawing no. 314-0018-01-S (VNR106-S) Page 3 of 3 Streamline Style Pad.



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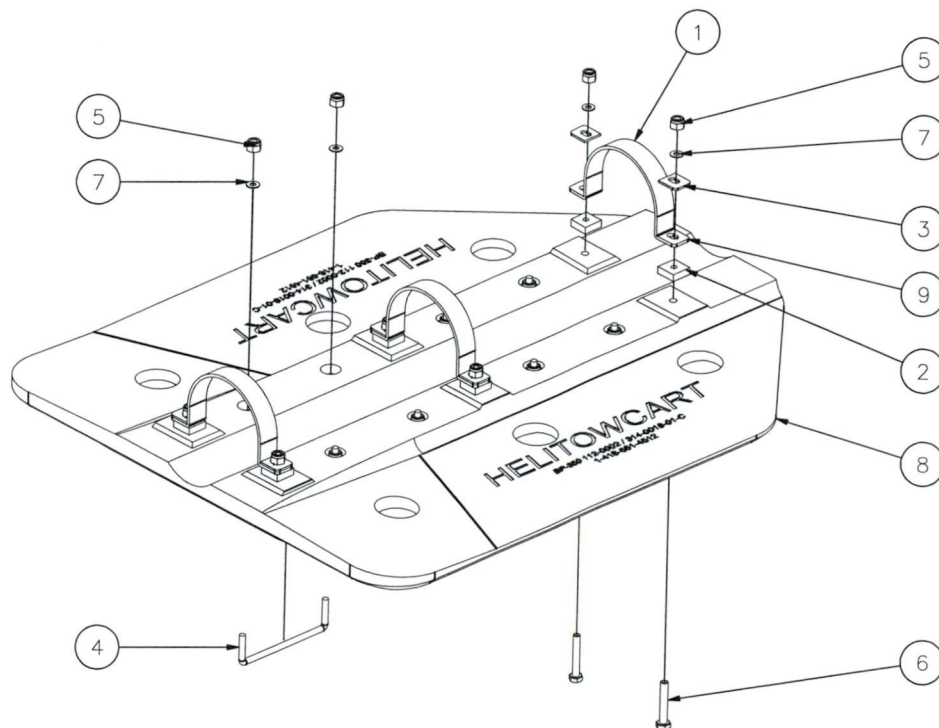
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DWG No 112-0002-00-S

1 OF 1


REVISIONS						DR. & DATE	STRESS	
1	REWORKABLE	2	NONREWORKABLE	3	NOTED			4
ZONE	REV	DESCRIPTION						
	A	ADDITION OF STREAMLINE PAD CONFIGURATION						
	B	ADDITION OF VENT HOLES ON THE STREAMLINE PAD						
	C	MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD						



NOTE: ICEBLADE ASSEMBLY, ITEM4,
CAN BE OMITED FROM INSTALLATION
(OPTIONAL)

1	3	314-0019-15	U SHAPED CLIP	STEEL		
2	6	314-0012-01-A	FILLER BLOCK	STEEL		1/4
3	6	314-0007-15-B	SLOTTED CLIP SUPPORT	STEEL		
4	4	314-0005-15-A	ICE BLADE ASSEMBLY	STEEL		1X6 1/4
5	14	262-0001-17-A	MD20365-42B	STEEL		1/4-28
6	6	261-0001-17-A	AN4-14A	STEEL		1/4-28 UNF
7	20	263-0001-17-A	AN960-416	STEEL		1/4
8	1	314-0018-01-S	PAD STREAM LINE	POLYETHYLENE UHMW	BLACK	1
9	1	314-0021-01-A	SHRINK			
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE

THE DESIGN DEPICTED IN THIS DRAWING IS THE EXCLUSIVE PROPERTY OF HELI TOW CART AND IN ACCEPTANCE OF THIS DRAWING THE RECIPIENT AGREES THAT IT WILL NOT BE USED FOR THE PURPOSE OF MANUFACTURE OR PROCUREMENT OF THE PART OR ASSEMBLY SHOWN HEREIN REPRODUCED OR OTHERWISE COPIED OR DISCLOSED TO ANY OTHER PERSON OR PARTY EXCEPT AS AUTHORIZED IN WRITING BY HELI TOW CART

				UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES:		DRAWN: S. BERNIER		31/07/2008		 <div>FOR OFFICIAL USE ONLY THIS DRAWING IS THE PROPERTY OF HELI TOW CART IT IS TO BE USED FOR THE PURPOSE OF MANUFACTURE OR PROCUREMENT OF THE PART OR ASSEMBLY SHOWN HEREIN REPRODUCED OR OTHERWISE COPIED OR DISCLOSED TO ANY OTHER PERSON OR PARTY EXCEPT AS AUTHORIZED IN WRITING BY HELI TOW CART</div>	
				LINEAR TOLERANCES		DESIGNED: S. BERNIER		31/07/2008			
				XX ±0.030 XXX ±0.010		CHECKED:					
				ANGULAR TOLERANCES: ±0.30° ALL MACHINE SURFACE		STRESS:					
				MATERIAL:		WEIGHT:				BEARPAW - BP350 ASSEMBLY STREAMLINE	
				MATERIAL SPEC:		APPROVED:					
				SIZE:		APPROVED:					
				HEAT TREAT:		APPROVED: M. ZGELA		31/07/2008			
				PROTECTION:		IDENTIFYING METHOD:				SCALE: NTS	
DASH NO		NEXT ASSY		QTY PER ACFT		MODEL		CAGE CODE: SIZE		DRAWING No. REV	
								B 112-0002-00-S		C	
								CAD FILE # 112-0002-00-S.dwg		SHEET: 1 OF 1	

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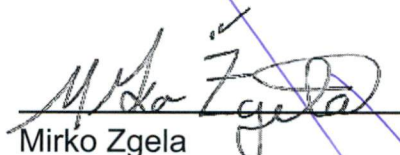
Master Document List

Helitowcart

Eurocopter Model AS 350/355 Series Helicopters Installation of BearPaw Model BP350

Report: HTC-MDL-BP-AS350/355-1000 (Rev F)

APPROVED BY:


Mirko Zgela

DATE: APRIL 8, 2010

Design Approval Representative DAR #310

See NCE-2017001-100001-10-01

Revision	Revision Date	Revision of Entry	Entered by
A	Nov 22, 2006	Initial issue	N/A
B	Jan 28, 2007	Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
C	Feb 28, 2007	Addition of streamline pad configuration. Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
D	July 27, 2008	Addition of vents holes in the streamline pad.	M.Z.
E	Aug 01, 2008	Modification of vents holes in the streamline pad.	M.Z.
F	April 8, 2010	Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.

1.0 MASTER DOCUMENTS

Document #	Title	Revision Status	Approval by	Date
AAC-CPL-BP-AS350/355-1000	Compliance Plan – Eurocopter Model AS350/355 Series Helicopters – Installation of BearPaw Model BP350	NC	DAR 310	Nov 22, 2006
HTC-314-0020-00	BearPaw Model BP350 – Installation Instructions – AS350/355 Series Helicopters	E	DAR 310	April 8, 2010
AAC-STR-BP-AS350/355-1000	Structural Substantiation – Helitowcart Inc. BearPaw Model BP350	NC	DAR 310	Nov 20, 2006
AAC-FTR-C-GZNC	Simple External Modification – Applicant's Flight Test Plan/Report	NC	DAR 310	Nov 21, 2006
HTS-EO-0709-002	Bear Paw Model BP350 Vent Holes	A	DAR 310	July 31, 2008
HTC-MEM-0709-001	Memorandum – Vent Hole BP350 BearPaw	A	DAR 310	July 31, 2008

2.0 MASTER DRAWINGS

Drawings #	Title	Revision Status	Approval by	Date
112-0002-00	BearPaw BP350 - Assembly	B	DAR 310	Nov 20, 2006
112-0002-00-S	BearPaw BP350 – Assembly Streamline	C	DAR 310	July 31, 2008
VNR084	BearPaw – Iceblade	R01	DAR 310	Apr 24, 2006
VNR085	BearPaw – Iceblade Threaded Rod	R01	DAR 310	Apr 24, 2006
VNR086	BearPaw – Iceblade Assembly	R01	DAR 310	Apr 24, 2006
VNR106	BearPaw BP350 - Pad	R02	DAR 310	Sept 26, 2006
VNR106-S	BearPaw BP350 – Pad Streamline	R03	DAR 310	July 31, 2008
VNR107	BearPaw BP350 – U Shaped Clip	R01	DAR 310	Sept 29, 2006
VNR089	Bearpaw – Slotted Clip Support	R04	DAR 310	July 31, 2006
VNR099	Filler Block 1/4"	R01	DAR 310	Aug 8, 2006



3.0 REFERENCE DOCUMENTS

Document #	Title	Revision Status	Approval by	Date
314-0009-01-A	Ultra High Molecular Weight Polyethylene – Typical Properties	A	N/A	May 24, 2006
314-0008-01-A	Material Properties - UHMW TIVAR	A	N/A	May 24, 2006
314-0017-05-A	Heat Shrink Specifications	A	N/A	Sept 6, 2006

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INTRODUCTION

Scope

This installation instruction describes the step-by-step approach to install and to perform maintenance of the Helitowcart BearPaw Model BP 350 (P/N 112-0002-00 or P/N 112-0002-00-S) for the AS 350 and AS 355 series helicopters.

General

The Helitowcart BearPaw is made of machined UHMW TIVAR® polymer sheet. This material combines high-impact performance, low friction and good resistance to chemical. Its high durability will provide superior performance when installed on your helicopter. Any question regarding the Helitowcart BearPaw system shall be directed to Helitowcart Customer Support as indicated in Table (1):

Table 1 – Helitowcart Customer Support

Care of	Mailing Address	Phone, Fax & Email:
Customer Support Helitowcart BearPaw Helitowcart (Vanair inc)	860 Marie-Victorin St-Nicholas, Levis, Quebec, Canada, G7A 3S9	Tel:1 (418) 561-4512 Fax:1 (418) 836-2291 info@helitowcart.com

Helicopter Effectivity

This installation instruction applies to the following helicopter models:

Table 2 – Helicopter Model Effectivity

Make	Model	Transport Canada Type Certificate Data Sheet
Eurocopter	AS 350 D	H-83
Eurocopter	AS 350 D1	
Eurocopter	AS 350 B	
Eurocopter	AS 350 B1	
Eurocopter	AS 350 B2	
Eurocopter	AS 350 B3	
Eurocopter	AS 350 BA	H-87
Eurocopter	AS 355 E	
Eurocopter	AS 355 F	
Eurocopter	AS 355 F1	
Eurocopter	AS 355 F2	
Eurocopter	AS 355 N	

Installer Responsibilities

The installer shall ensure that the installation of the Helitowcart BearPaw does not conflict with any other part of the helicopter configuration. Technicians performing this installation should be familiar with A/C work and should have been familiarized with the different Helitowcart BearPaw system components prior to performing a first time installation. All steps in this procedure must be followed. Deviations from the procedures may result in potential structural failure or equipment malfunction and will result in a non-compliant installation.

INSTALLATION

BearPaw Installation

Reference Documentation:

- [1] Helicopter Maintenance Manual AS 350 or AS 355 as applicable.

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] as applicable to your helicopter model to allow a ground clearance of the skid in the area of the aft cross tube of approximately 1 1/2" (38mm);

Note: The BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) can be installed with or without the skid tube wear shoes.

Step 2: IceBlade Installation

Note: The BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) can be installed with or without the IceBlades

- With IceBlade Option
- Install ice blades (Qty: 4) (Iceblades P/N 314-0005-15) under BearPaw pad as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A.
- Secure ice blades with washer (Washer P/N 263-0001-17) and nut (P/N 262-0001-17).

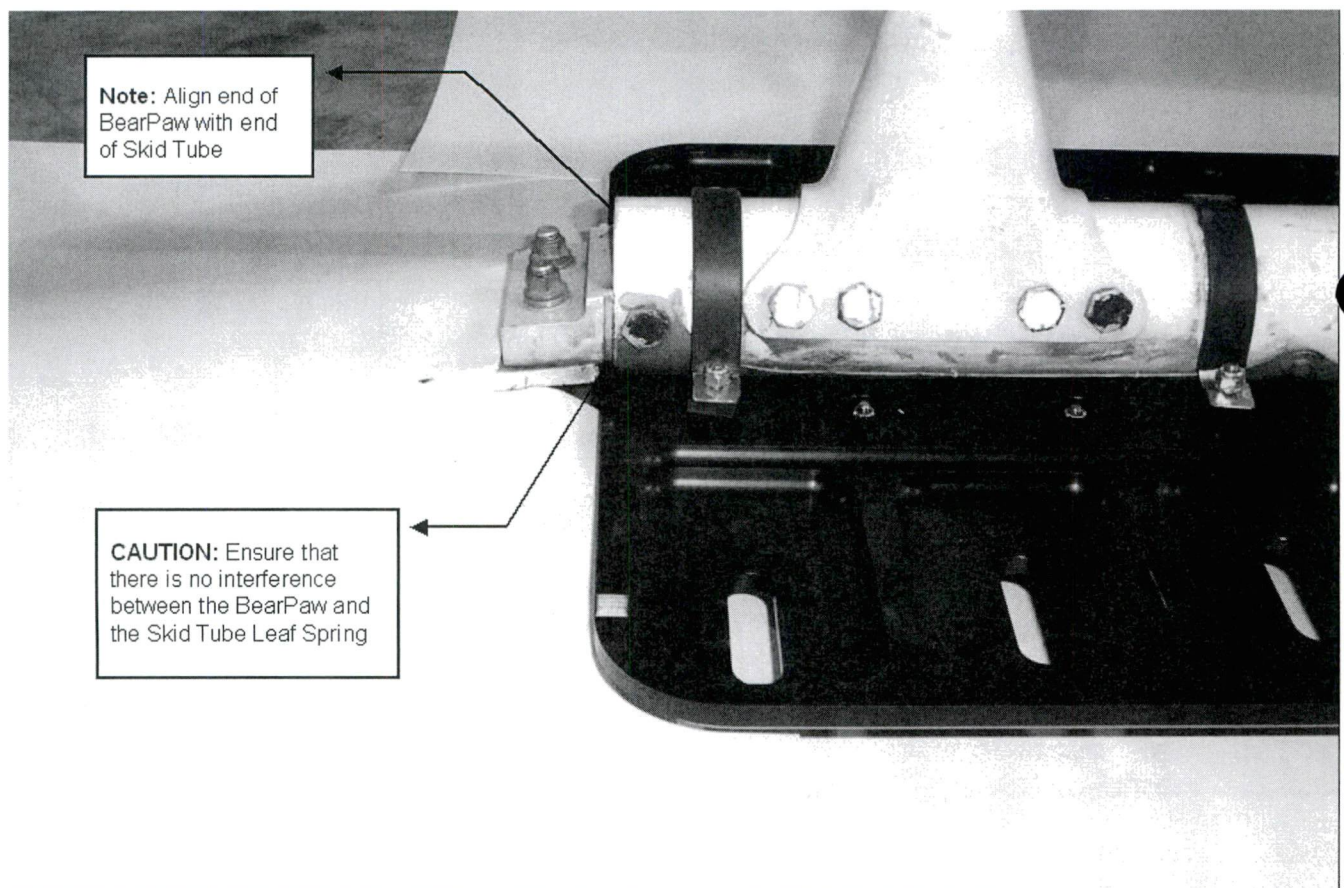
Step 3: BearPaw Installation

- Position the BearPaw under the skid as shown in Figure 1 with narrow edge pointing forward.
- Insert washers (P/N 263-0001-17) through all six bolts: 6x(261-0001-17);
- Insert bolts (P/N 261-0001-17) and washer (Washer P/N 263-0001-17) through BearPaw pad as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A;
- Insert filler blocks (P/N314-0012-01) as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A;

Note: The use of filler blocks (P/N314-0012-01) may be replaced or complemented by the use of washers (P/N 263-0001-17) to fill in the gap. Bolts (P/N 261-0001-17) may be replaced by longer or shorter AN4 bolts as required.

- Insert both U-shaped clips (P/N 314-0019-15) through bolts: 6x(261-0001-17);
- Insert slotted clip supports (P/N 314-0007-15) through all six bolts. Position slotted clip supports with rounded edge toward helicopter skid;
- Insert washer (P/N 263-0001-17) & screw nuts (P/N 262-0001-17) for a tight fit. Max. torque on nuts 60 in.-lb;
- Remove helicopter from lift;
- Amend Weight & Balance records as required using data provided in Table 3.

Figure 1 – BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) - Alignment on Skid



BearPaw Removal

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] to allow a clearance of the skid in the area of the aft cross tube of approximately 1 ½" (38mm);

Step 2: BearPaw Removal

- Remove nuts (P/N 262-0001-17), slotted clip support (P/N 314-0007-15) on U-shaped clips (P/N 314-0019-15),
- Remove washers (P/N 263-0001-17), U-shaped clips (P/N 314-0019-15), filler blocks (P/N 314-0012-01), and remove BearPaw pad (P/N 314-0018-01);
- Inspect skid tubes to confirm serviceability
- If the skid tube shoes have been removed, re-install shoes as per reference [1];
- Complete installation by putting helicopter back to normal position by removing lift status;
- Amend Weight & Balance records as required using data provided in Table 3.

Weight & Balance

The following information should be used to amend the helicopter weight and balance information following the installation or removal:

Table 3 – Weight & Balance Data

Item	Weight	Lateral		Longitudinal	
		Arm	Moment	Arm	Moment
Helitowcart BearPaw Model BP350 (P/N 112-0002-00)	19,9 Lb 9,0 Kg	N/A	N/A	159,4 in. 404.9 cm	3172.0 in-lb 36.44 m-kG
Helitowcart BearPaw Model BP350 - Streamline (P/N 112-0002-00-S)	18,3 Lb 8,5 Kg	N/A	N/A	159,4 in. 404.9 cm	2917.0 in-lb 34.41 m-kG

Note: Weight and moment provided are for full kit installation.

Parts Lists

The Helitowcart BearPaw detailed parts list is as follow:

Table 4 – Parts List

Description	Qty	Part No.	Drawing no./name
BearPaw Model BP350	1	112-0002-00	VNR(112-0002-00) / BearPaw Assembly VNR (112-0002-00-S) /Bear Paw Streamline Assembly
BearPaw pad ⁽¹⁾	1	314-0018-01	VNR106 / BearPaw BP350 – Pad
BearPaw pad streamline ⁽¹⁾	1	314-0018-01S	VNR106S / BearPaw BP350 – Pad Streamline
U Shaped Clips	3	314-0019-15	VNR107 / BearPaw BP350 - U Shaped Clips
Slotted Clip Support	6	314-0007-15	VNR089 / BearPaw - Slotted Clip Support

Filler blocks 1/4"	6	314-0012-01	VNR099 / BearPaw – Filler block 1/4"
Bolts	6	261-0001-17	Bolt- AN4-14
Nuts	6	262-0001-17	Nut- MS20365-428
Washers	12	263-0001-17	Washer – AN960-416
Shrink	3	314-0021-01	BearPaw – Shrink Specifications & Install.(1"x6.25")
IceBlade Option Model OIB	4	314-0005-15	VNR086 / IceBlade Assembly
Nuts	8	262-0001-17	Nut- MS20365-428
Washers	8	263-0001-17	Washer – AN960-416

Note (1): Use BearPaw Pad P/N 314-0018-01 for VNR P/N 112-0002-00 and BearPaw Pad P/N 314-0018-01-S for VNR P/N 112-0002-00-S as applicable.

INSPECTION

Life Limited Items

Three are no life limited items for the Helitowcart BearPaw.

Pre-Flight

Before each flight the following items should be inspected:

- Check that attachment bolts are installed and secured,
- Check that BearPaws are free from visible damage,
- If damage is found, verify allowable damage according to:
 Table 5 – Tolerances for cracks & wear and
 Annex B – BearPaw Allowable Damage Drawing (VNR106 page 2 of 2 or VNR 106S page 2 of 2)

Periodic Inspection Schedule

- The Helitowcart BearPaw shall be inspected every 500 flying hours or yearly whichever comes first.
- The Helitowcart BearPaw can be inspected concurrently with the helicopter landing gear inspection.
- Recommended tolerance for performance of inspection is +/- 10% of the 500 hours period.
- Following an inspection, subsequent interval shall be adjusted to meet the original schedule from time of inspection. If inspection is performed earlier than the 10% tolerance, then following inspections shall be scheduled not to exceed the above mentioned tolerance.

500 Hour or Yearly Inspection Details

- Remove Helitowcart BearPaw: See Section "BearPaw Removal",
- Inspect all parts for damage & wear. See table & figure below for allowable damage,
- Replace all damaged parts,
- Replace parts worn beyond the tolerances indicated below.
- See Tolerances for cracks & wear:
 Table 5 – Tolerances for cracks & wear, &
 Annex B – BearPaw Allowable Damage Drawing (VNR106 page 2 of 2 or VNR 106S page 2 of 2)

Table 5 – Tolerances for Cracks & Wear

Zone	Nominal Dimension (Inches)	Allowable Damage/Wear (Inches)	Cracks
A	0,50	0,050	
B	1,000	0,250	

C	0,375	0,075	<u>Pockets:</u> Cracks are acceptable in the Helitowcart BearPaw pocket areas to a maximum length of 0,5" provided they are 0,25" away from the stiffener radius change. Stop drill cracks with a 0,125" hole.
D	0,50	None	<u>Stiffeners:</u> NO cracks in stiffeners.
E	0,375	0,075	<u>For P/N 112-0002-00-S Only</u>

Overhaul Requirements


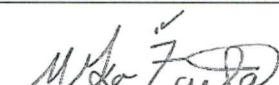
- Not applicable for the designated application of this device.

REVISIONS & APPROVAL

Revisions

Date	Rev	Nature of Revisions
Nov 20, 2006	A	Initial issue
Jan 29, 2007	B	Minor editorials. Change to weight & Balance Data to reflect production model. Change in inspection schedule from 300 to 500 hours to match existing landing gear periodicity.
Feb 28, 2008	C	Introduction of new streamline BearPaw Pad configuration as alternate.
Aug 01, 2008	D	Modification of vent holes on the streamline pad
April 8, 2010	E	Correction to CofG data

Approval

Internal Approval :		
Helitowcart inc.	 Lucien Barbeau, President	April 8, 2010 Date:
External Approval :		
Transport Canada	 Mirko Zgela, DAR #310	April 8, 2010 Date:

Annex A

See: BearPaw Assembly, drawing no. (112-0002-00) or;
BearPaw Assembly, drawing no. (112-0002-00-S)

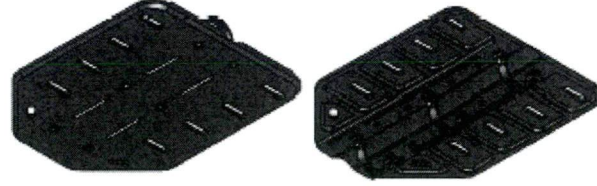
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See: BearPaw Pad, drawing no. VNR106. Page 2 of 2 or;
BearPaw Pad, drawing no. VNR106-S. Page 2 of 2.

Annex A

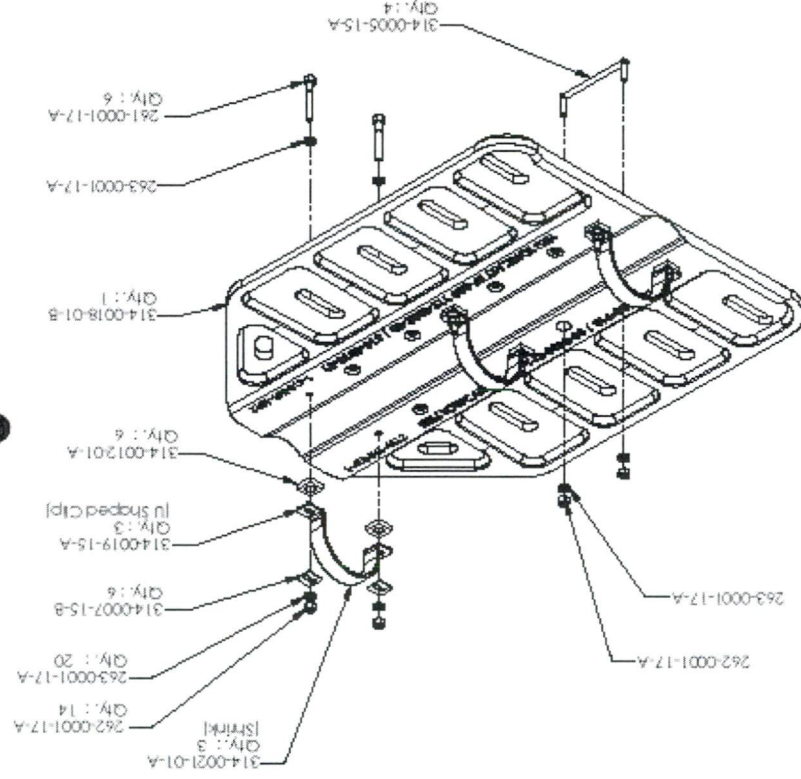
BearPaw Assembly, Drawing no. VNR(112-0002-00).
P/N 112-0002-00

No.	Qty.	Description	Part #	Rev #
1	1	BearPaw BP-350 - Pod	314-0018-01	B
2	3	BearPaw BP-350 - U shaped clip	314-0019-15	A
3	3	BearPaw BP-350 - Shrink 1" x 6 1/4"	314-0021-01	A
4	6	BearPaw - Sotted clip support	314-0007-15	B
5	6	BearPaw - Filter Block 1/4"	314-0012-01	A
6	4	BearPaw - Iceblade Assembly	314-0005-15	A
7	6	Bolt AN4-14A	261-0001-17	A
8	20	Washer AN650-416	263-0001-17	A
9	14	Nut MS20365-128	262-0001-17	A



Note : Iceblade assembly can be omitted from installation (Optional)

HELI TOW CART 2000, 2500, 3000, 3500, 4000, 4500, 5000, 5500, 6000, 6500, 7000, 7500, 8000, 8500, 9000, 9500, 10000 112-0002-00 112-0002-00		11/20/04 14 1
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Rev #	Rev #	Rev #	Rev #
1	2	3	4
11/20/04	11/20/04	11/20/04	11/20/04
1	2	3	4

Annex A

BearPaw Assembly, Drawing no. VNR(112-0002-00-S).
P/N 112-0002-00-S



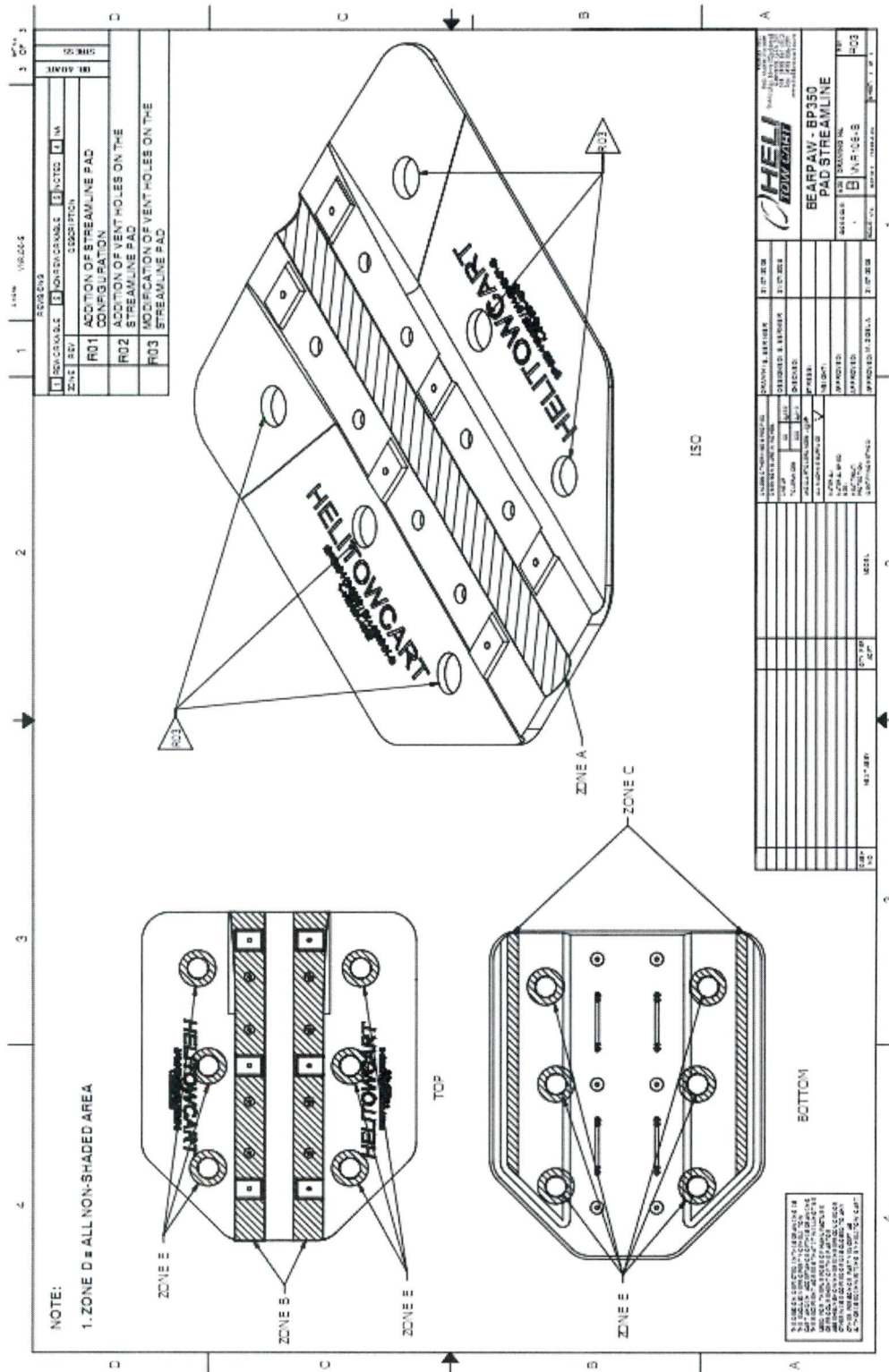
Annex B

BearPaw Pad, Drawing no. VNR106. Page 2 of 2.
P/N 314-0018-01


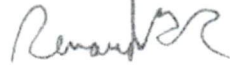





Annex B

BearPaw Pad, Drawing no. VNR106S. Page 2 of 2.
P/N 314-0018-01-S



Engineering Order

Title: Repair of BearPaw BP350 for Installation with Dart Wear Pads				
EO Number: HTC-EO-0709-003 Rev NC		Date issued: April 02, 2015		
Customer:		Project number: A2007-09		
BEARPAW INFORMATION				
Part Number / Description: 314-0018-01-S / BP350 Pad Streamline		Drawing: 314-0018-01-S, Rev D, dated December 21, 2012		
SIGNATURE				
Prepared by:  R. Berthelot, Eng. (OIQ# 5033095) Aviatech (ATS)	Mechanical:  R. Berthelot, Eng. (OIQ# 5033095) Aviatech (ATS)	Electrical: 	Verified:  J-F. Lemire, Eng. (OIQ# 141774) Aviatech (ATS)	Approved:  Mirko Zgela (DAR #310) Aviatech (ATS)
SCOPE: Aviatech Technical Services (ATS) has been contracted by Helitowcart to develop a repair procedure that aims at removing interference between BearPaw BP350 and Dart wear pad bolt heads. This Engineering Order (EO) describes the step-by-step approach to perform this repair and evaluates structural compliance of the repaired BearPaw.				
REFERENCES DOCUMENTS: The following documents is needed to carry out the modification:				
[1] 314-0020-00-E, BearPaw Model BP350 – Installation Instruction – AS350/355 Series, Rev F, dated December 21, 2012.				
GENERAL: All steps in this procedure must be followed. Any deviations or enquiries related to the process are to be forwarded to Aviatech Technical Services at (819) 601-8049 for approval prior to performing the modification.				
SAFETY: The use of proper safety equipment and safe work environment is required at all time.				
SPECIAL TOOLS: <ul style="list-style-type: none"> • Dremel rotary tool • Carbide end mill, 1/8" shank diameter, 1" length of cut, overall length 3" (P/N 3066A59 from Mc Master Carr or equivalent) 				

DESCRIPTION OF CHANGE:

When BearPaw BP350 is installed on a skid equipped with Dart wear pads, interference occurs between bolt heads and BearPaw (Figure 1). This can damage the BearPaw, as shown on Figure 2. Damages on this figure were obtained directly after first installation, without performing any landing.

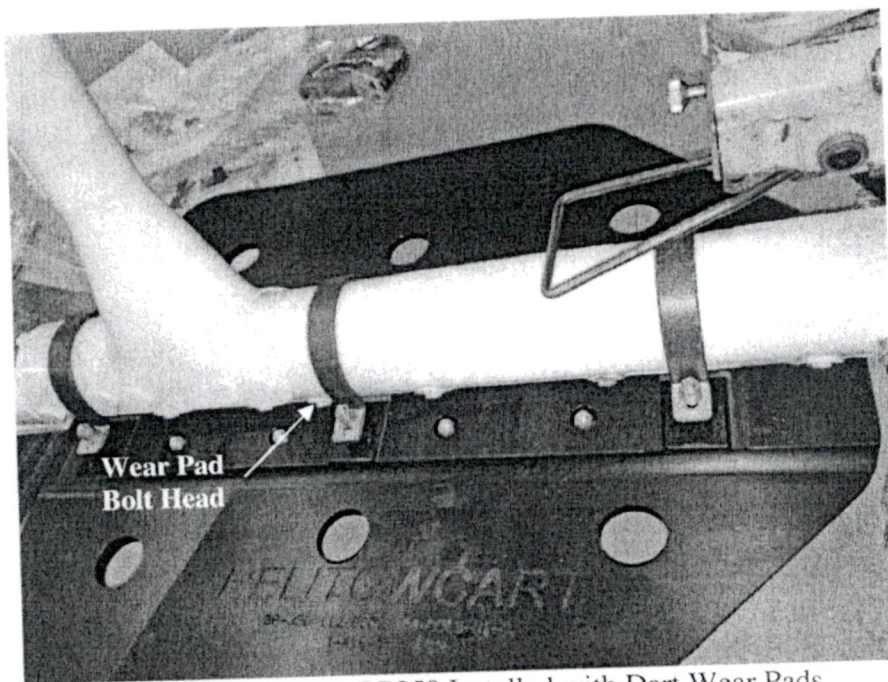


Figure 1 – BearPaw BP350 Installed with Dart Wear Pads

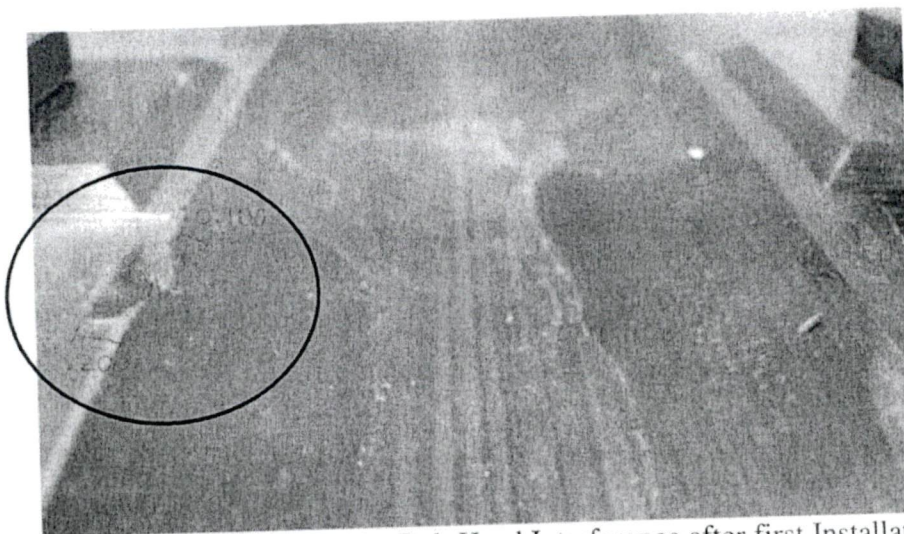


Figure 2 – Damages caused by Bolt Head Interference after first Installation

Repair consists in cutting small pockets in the BearPaw to clear the wear pad bolt heads (Figure 3).

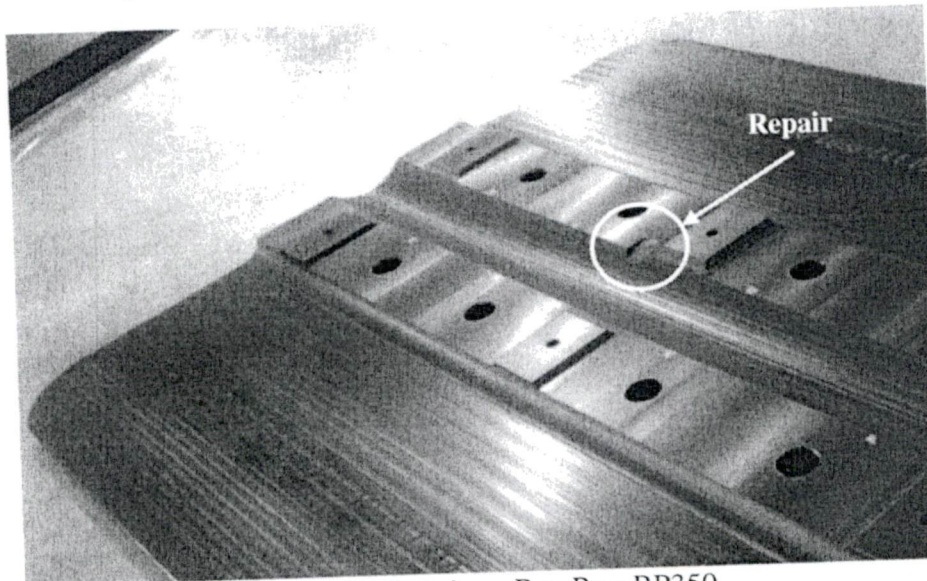


Figure 3 – Repair on BearPaw BP350

STRUCTURAL SUBSTANTIATION:

Structural substantiation of streamline BearPaw BP350 is performed in document HTC-MEM-0709-001 Rev A. Figure 4 is taken from this report and shows that equivalent stress is small in the region where the repair is performed since BearPaw thickness in this region is much larger than in the critical regions. Stress in this region for the repaired BearPaw will remain below stress in the critical region. Therefore, repair is structurally adequate.

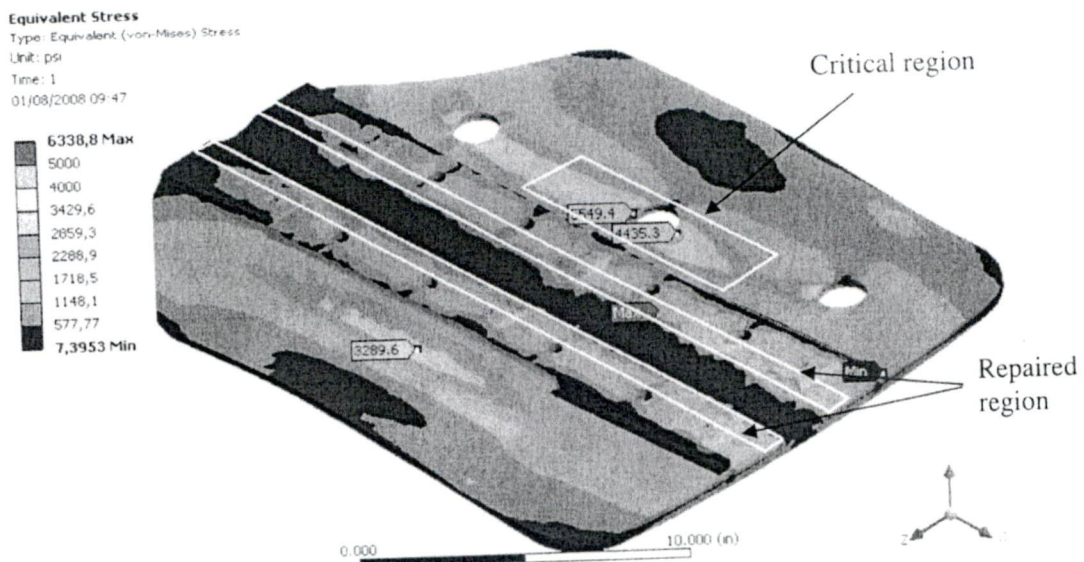
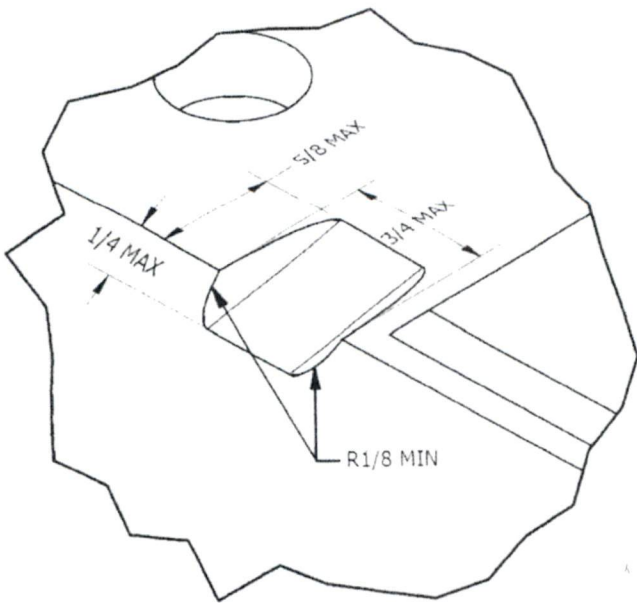
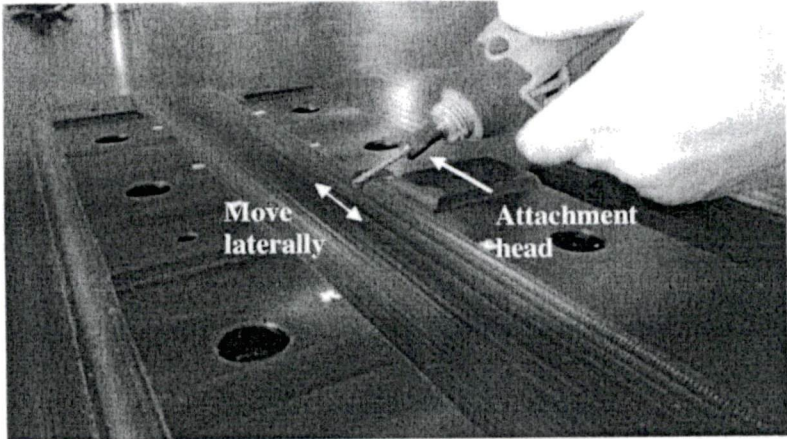


Figure 4 – Structural Substantiation – BearPaw BP350 Streamline Equivalent Stress

REPAIR PROCEDURE:

Step#	Description	Product / Tool	Sign /Date
1.0	Initial Helicopter Preparation		
1.1	Prior to equipment installation, ensure that the helicopter is safe for maintenance.		
2.0	BearPaw Removal		
2.1	Mark on BearPaws the locations of wear pad bolts that interfere with BearPaw or could eventually damage it.		
2.2	Remove BearPaws from helicopter skid as per installation instructions.		
3.0	BearPaw Repair		
3.1	Remove all components from BearPaw pads.		
3.2	<p>Repair BearPaw pads based on the following dimensions.</p>  <p>NOTE Only repair BearPaws at locations where damage occurred, or where damage could eventually occur. Reduce above dimensions as required, except radius.</p>	Dremel End mill	

Step#	Description	Product / Tool	Sign /Date
	<p>NOTE</p> <p>Move <i>Dremel</i> laterally as shown on below picture. Do not move forward and aft of it would mark lines on the surface.</p>  <p>NOTE</p> <p>Recommended tool is a CNC like rotary tool (carbide end mill, 1/8" shank diameter, 1" length of cut, overall length 3"). The long length of cut is required in order to machine the surface laterally without moving the tool forward and aft. The long overall length is required to clear BearPaw surface with attachment head.</p> <p>The use of the following tools is NOT recommended for the repair since they were tested and melt BearPaw surface:</p> <ul style="list-style-type: none"> • Sanding rotary tool • Drill bit used with rotary tool • Half round wood file • Ball nose end mill 		
4.0 BearPaw Installation			
4.1	Install BearPaws on helicopter skid as per installation instructions.		



Department of Transport

Supplemental Type Certificate

This approval is issued to:

Helitowcart (Vanair Inc.)
877A, Alphonse-Desrochers
St-Nicholas, Lévis, Québec
Canada G7A 5K6

Number: SH06-24

Issue No.: 4

Approval Date: August 17, 2006

Issue Date: October 10, 2013

Responsible Office:

Québec

Aircraft/Engine Type or Model:

See Continuation Sheet on Page 2 of 2

Canadian Type Certificate or Equivalent:

See Continuation Sheet on Page 2 of 2

Description of Type Design Change:

Installation of Helitowcart BearPaw

**Installation/Operating Data,
Required Equipment and Limitations:**

For the Robinson Models R44, R44 II and R66 Helicopters:

Installation of Helitowcart Bear Paw BP44 is to be performed in accordance with TC approved Helitowcart Master Document List Report: HTC-MDL-BP-R44-1000, Revision D dated August 28, 2013, or later Transport Canada approved revision.

The BearPaw must be installed in accordance with Helitowcart Document: 314-0011-00, BearPaw Model BP44, Installation Instructions - R44/R66, Revision E dated August 09, 2013 or later Transport Canada approved revision.

See Continuation Sheet Page 2 of 2



Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.


Jean-Pierre Francoeur
For Minister of Transport

Canada

*(Continuation Sheet)*

Number: SH06-24 Issue 4

NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

**Installation/Operating Data,
Required Equipment and Limitations (Cont'd):**For the Eurocopter (formerly Aerospatiale) AS350 and AS355 Series Helicopters:

Installation of Helitowcart Bear Paw BP350 is to be performed in accordance with TC approved Helitowcart Master Document List Report: HTC-MDL-BP-AS350/355-1000, Revision F dated April 8, 2010, or later Transport Canada approved revision.

The BearPaw must be installed in accordance with Helitowcart Document: 314-0020-00-E, BearPaw Model BP350, Installation Instructions - AS350/355, Revision F dated December 21, 2012 or later Transport Canada approved revision.

For the Eurocopter EC 130 Helicopters:

Installation of Helitowcart Bear Paw BP130 is to be performed in accordance with TC approved Helitowcart Master Document List Report: HTC-MDL-BP-EC130-1000, Revision A dated May 13, 2011, or later Transport Canada approved revision.

The BearPaw must be installed in accordance with Helitowcart Document: 314-0031-00-A, BearPaw Model BP130, Installation Instructions - EC130, Revision A dated May 04, 2011 or later Transport Canada approved revision.

Fleet Eligibility List		
Make	Model	Type Certificate Data Sheet
Robinson	R44	H-97
Robinson	R44 II	H-97
Robinson	R66	H-111
Eurocopter	AS 350 B	H-83
Eurocopter	AS 350 B1	H-83
Eurocopter	AS 350 B2	H-83
Eurocopter	AS 350 B3	H-83
Eurocopter	AS 350 BA	H-83
Eurocopter	AS 350 D	H-83
Eurocopter	EC 130 B4	H-83
Eurocopter	AS 355 E	H-87
Eurocopter	AS 355 F	H-87
Eurocopter	AS 355 F1	H-87
Eurocopter	AS 355 F2	H-87
Eurocopter	AS 355 N	H-87

- End -

United States of America
Department of Transportation -- Federal Aviation Administration

Supplemental Type Certificate

IMPORT

Number SR02432NY

This certificate issued to Helitowcart (Vanair Inc.)
877A, Alphonse-Desrochers
Saint-Nicholas, Lévis, Québec
Canada G7A 5K6

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of * of the * Regulations.*

Original Product -- Type Certificate Number: * * See attached FAA Approved Model List (AML) No. SR02432NY for the list of approved aircraft models, applicable airworthiness regulations, and required documents.
Make: *
Model: *

Description of Type Design Change:

1. Installation of Helitowcart Bear Paw Models BP350, BP44 or BP130 in accordance with Helitowcart Master Document Lists as specified in AML SR02432NY.
2. Instructions for Continued Airworthiness documents as specified in AML SR02432NY are required with this installation.

Limitations and Conditions:

1. A copy of this certificate and FAA AML No. SR02432NY must be maintained as part of the permanent records of this modified aircraft.
2. The Installer must determine whether this design change is compatible with previously approved modifications.
3. If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration

Date of application: March 26, 2007

Date reissued:

Date of issuance: July 20, 2007

Date amended: January 14, 2013, June 3, 2014



By direction of the Administrator

[Signature]
(Signature)
Gaetano Sciortino
Manager, New York
Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

**FAA APPROVED MODEL LIST (AML) NO. SR02432NY
HELITOWCART (VANAIR, INC.)
FOR
INSTALLATION OF BEAR PAWS**

Original Issue Date: July 20, 2007
Amended Date: June 3, 2014


PART	REGULATION	MAKE	MODEL	TCDS	REQUIRED DOCUMENTATION			AML AMENDMENT DATE
					MASTER DOCUMENT LIST	INSTALLATION INSTRUCTIONS	INSTRUCTIONS for CONTINUED AIRWORTHINESS	
27	Federal Aviation	Airbus Helicopters	AS350B, B1, B2, B3, BA, D, D1	H9EU	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- AS350/355-1000 Rev. G, approved on December 21, 2012 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - AS350/355, Bear Paw Model BP350, document no. 314-0020-00-E, Rev. F, approved on December 21, 2012 or later Transport Canada approved revision.	Contained within Installation Instructions, page 8 of document no. 314- 0200-00-E, Revision F.	June 3, 2014
27	Federal Aviation	Airbus Helicopters	EC 130B4	H9EU	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- EC130-1000 Rev A, approved on May 13, 2011 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - EC130, Bear Paw Model BP130, document no. 314- 0031-00-A, Rev. A, approved May 4, 2011 or later Transport Canada approved revision	Contained within Installation Instructions, page 6 of document no. 314- 0031-00-A, Revision A.	June 3, 2014
27	Federal Aviation	Airbus Helicopters	AS355E, F, F1, F2, N	H11EU	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- AS350/355-1000 Rev. G, approved on December 21, 2012 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - AS350/355, Bear Paw Model BP350, document no. 314-0020-00-E, Rev. F, approved on December 21, 2012 or later Transport Canada approved revision.	Contained within Installation Instructions, page 8 of document no. 314- 0200-00-E, Revision F.	June 3, 2014
27	Federal Aviation	Robinson Helicopter Company	R44, R44 II	H11NM	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- R44-1000 Rev. D, approved on August 28, 2013 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - R44/R66, Bear Paw Model BP44, document no. 314-0011-00, Rev. E, approved on August 9, 2013 or later Transport Canada approved revision.	Contained within Installation Instructions, page 6 of document no. 314- 0011-00, Rev. E.	June 3, 2014

FAA APPROVED MODEL LIST (AML) NO. SR02432NY
HELITOWCART (VANAIR, INC.)
FOR
INSTALLATION OF BEAR PAWS

Original Issue Date: July 20, 2007
Amended Date: June 3, 2014

PART	REGULATION	MAKE	MODEL	TCDS	REQUIRED DOCUMENTATION			AML AMENDMENT DATE
					MASTER DOCUMENT LIST	INSTALLATION INSTRUCTIONS	INSTRUCTIONS for CONTINUED AIRWORTHINESS	
27	Federal Aviation	Robinson Helicopter Company	R66	R00015LA	Helitowcart Inc. Master Document List, Report no. HTC-MDL-BP- R44-1000 Rev. D, approved on August 28, 2013 or later Transport Canada approved revision.	Helitowcart Inc. Installation Instructions - R44/R66, Bear Paw Model BP44, document no. 314-0011-00, Rev. E, approved on August 9, 2013 or later Transport Canada approved revision.	Contained within Installation Instructions, page 6 of document no. 314- 0011-00, Rev. E.	June 3, 2014

FAA Approved: _____


Gaetano Sciortino
Manager, New York
Aircraft Certification Office

Helitowcart – NON CONFORMITY report	F80-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Section A - Non conformity description

Product / Output: BP350 - Documents	NCR: 2017-06-01-nb-01 yyyy-mm-dd-initials-#
Product no: 112-0002-00-S-rev C	ASS no: -
Non conformities: 2 DOC FOUND TO BE PREVIOUS	CARPAR no: -
VERSION: MDA - rev. F → G	BATCH: HTC-LNF-14114-01
INSTALL INSTR 314002000E → F	Supplier: -
	Supplier ref no: -
NOTE: SINCE NC OCCURRED IN 2014 2 WAS FOUND IN 2017 WITH ONLY 2 KITS LEFT IN STOCK. NATURE OF CHANGES HAS NO IMPACT ON SAFETY & EFFICIENCY.	
Initiated by: N. Barleau Date: 2017 06 01	Quantity rejected: 2 Quantity in the lot: 20

Section B – Prescribed disposition

Decision & notes: • REPLACE DOCS IN 2 BOX IN STOCK • LEAVE THOSE IN MARKET AS IS AS CUSTOMERS ALREADY CONTACT US FOR UPDATES	<input type="checkbox"/> Wait <input type="checkbox"/> Discard <input type="checkbox"/> Return to supplier <input checked="" type="checkbox"/> Repair <input checked="" type="checkbox"/> Use as is <input type="checkbox"/> Derogation (=use as is with or without repair)	
Actions	Resp	Verified by
1. REPLACE DOCS IN BOX #4 & #15 IN STOCK	NB	NB
2. ADD NOTE & CORRECT VERSION TO RELEASE INSP. RECORDS.	NB	NB
Prescribed by: N. Barleau Date: 2017 06 01		

Section C – Final verification

Decision & notes: SINCE THE CONTACT NATURE OF CHANGES BETWEEN THE 2 VERSIONS HAS NO IMPACT ON USE, EFFICIENCY & SAFETY, THIS NCR CAN BE CLOSED WITHOUT FURTHER ACTION
Closed by: N. Barleau Date: 2017-06-01

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
29	112 0002 005-D	BP350 STREAMLINED	HTC-LNF- 130202- 01 HTC-LNF-yyymmdd-seq
Includes:			
	SEE ATTACHED EXCEL CHART	LN-	Audit TC 2013
		LN-	
		LN-	
		LN-	
		LN-	
		LN-	
		LN-	

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES IN BAGS	
B	100%	" " DOCUMENTS IN BAGS	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	" COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: N. BARBEAU			Date: 2013 02 02

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2013 02 02	29 Pairs	OK NB	OK IB	OK IB	OK IB	OK IB	

Release certificates issue

Release Certificates issued: yes no	By: N. Barbeau	Date: 2013 02 02
Comments:		
HTC-LNF- 130202- 01 à 29		

HTC-RC-130202-01 (a)																																																																
																													HTC-LNF-130202-01	P/N	Qté par paire	Nb paires req	Qté totale pièces	Lot 1	Qty	Lot 2	Qty																											
1	2	3	4	5	6	7	8	9	10	11	12	13	14	15	16	17	18	19	20	21	22	23	24	25	26	26	28	29																																				
Pads																																																																
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Bp pads STREAMLINE	314 0018 01 C	2	29	58	LN-121212-01																														
Iceblade Assy (**not installed, simply inserted parts into bag)																																																																
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Iceblade Assy	263 0005 15 C	8	29	232	LN-121127-01																														
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Nuts	262 0001 17 A	16	29	464	API - MS21044N4 1 Lot 77347																														
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	16	29	464	API- NAS1149F0463P- lot 86876																														
Bags with parts for customer assy of Front U-clips																																																																
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	U-shaped Clips	314 0019 15 B	6	29	174	LN-121127-05																														
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Slotted clip Supports	314 0007 15 B	12	29	348	LN-121127-02																														
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L2	L2	L2	L2	Bolts AN4-14A	261 0001 17 A	12	29	348	API-AN4-14A / Lot 85681	300	Aircraft Spruce lot 74944/14597	48																										
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Nuts	262 0001 17 A	12	29	348	API - MS21044N4 1 Lot 77347																														
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Washers	263 0001 17 A	24	29	696	API- NAS1149F0463P- lot 86876																														
L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	L1	Filler blocks 1/4"	314 0012 02 A	12	29	348	LN-121221-01																														

S. Balaban
2013 02 02.

Master Document List

Helitowcart

Eurocopter Model AS 350/355 Series Helicopters Installation of BearPaw Model BP350

Report: HTC-MDL-BP-AS350/355-1000 (Rev G)

APPROVED BY:



DATE: DECEMBER 21, 2012

Mirko Zgela
Design Approval Representative DAR #310

Revision	Revision Date	Revision of Entry	Entered by
A	Nov 22, 2006	Initial issue	N/A
B	Jan 28, 2007	Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
C	Feb 28, 2007	Addition of streamline pad configuration. Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
D	July 27, 2008	Addition of vents holes in the streamline pad.	M.Z.
E	Aug 01, 2008	Modification of vents holes in the streamline pad.	M.Z.
F	April 8, 2010	Revision performed to the Installation Instructions (Doc # HTC-314-0020-00)	M.Z.
G	December 21, 2012	Updated Tolerance data regarding Pad and Updated referenced document identification and revisions	M.Z.

1.0 MASTER DOCUMENTS

Document #	Title	Revision Status	Approval by	Date
AAC-CPL-BP-AS350/355-1000	Compliance Plan – Eurocopter Model AS350/355 Series Helicopters – Installation of BearPaw Model BP350	NC	DAR 310	Nov 22, 2006
HTC-314-0020-00-E	BearPaw Model BP350 – Installation Instruction – AS350/355 Series Helicopters	F	DAR 310	Dec 21, 2012
AAC-STR-BP-AS350/355-1000	Structural Substantiation – Helitowcart Inc. BearPaw Model BP350	NC	DAR 310	Nov 20, 2006
AAC-FTR-C-GZNC	Simple External Modification – Applicant's Flight Test Plan/Report	NC	DAR 310	Nov 21, 2006
HTS-EO-0709-002	Bear Paw Model BP350 Vent Holes	A	DAR 310	July 31, 2008
HTC-MEM-0709-001	Memorandum – Vent Hole BP350 BearPaw	A	DAR 310	July 31, 2008

2.0 MASTER DRAWINGS

Drawings #	Title	Revision Status	Approval by	Date
112-0002-00	BearPaw BP350 - Assembly	B	DAR 310	Nov 20, 2006
112-0002-00-S	BearPaw BP350 – Assembly Streamline	D	DAR 310	Dec 21, 2012
314-0002-15 (VNR084)	BearPaw – Iceblade	A (R01)	DAR 310	Apr 24, 2006
314-0004-15 (VNR085)	BearPaw – Iceblade Threaded Rod	A (R01)	DAR 310	Apr 24, 2006
314-0005-15 (VNR086)	BearPaw – Iceblade Assembly	A (R01)	DAR 310	Apr 24, 2006
314-0007-15 (VNR089)	Bearpaw – Slotted Clip Support	B (R04)	DAR 310	July 31, 2006
314-0012-01 (VNR099)	Filler Block ¼"	A (R01)	DAR 310	Aug 8, 2006
314-0018-01 (VNR106)	BearPaw BP350 - Pad	B (R02)	DAR 310	Sept 26, 2006
314-0018-01-S (VNR106-S)	BearPaw BP350 – Pad Streamline	D	DAR 310	Dec 21, 2012
314-0019-15 (VNR107)	BearPaw BP350 – U Shaped Clip	A (R01)	DAR 310	Sept 29, 2006

3.0 REFERENCE DOCUMENTS

Document #	Title	Revision Status	Approval by	Date
314-0009-01	Ultra High Molecular Weight Polyethylene – Typical Properties	A	N/A	May 24, 2006
314-0008-01	Material Properties - UHMW TIVAR	A	N/A	May 24, 2006
314-0017-05	Heat Shrink Specifications	A	N/A	Sept 6, 2006

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Pre-Flight	p.8
Periodic Inspection Schedule	p.8
500 Hour or Yearly Inspection Details	p.8
Overhaul Requirements	p.9
 REVISIONS & APPROVAL	 p.10
 Annex A (BearPaw Assembly Drawing)	
Annex B (BearPaw Pad Drawing)	

INTRODUCTION

Scope

This installation instruction describes the step-by-step approach to install and to perform maintenance of the Helitowcart BearPaw Model BP 350 (P/N 112-0002-00 or P/N 112-0002-00-S) for the AS 350 and AS 355 series helicopters.

General

The Helitowcart BearPaw is made of machined UHMW TIVAR® polymer sheet. This material combines high-impact performance, low friction and good resistance to chemical. Its high durability will provide superior performance when installed on your helicopter. Any question regarding the Helitowcart BearPaw system shall be directed to Helitowcart Customer Support as indicated in Table (1):

Table 1 – Helitowcart Customer Support

Care of	Mailing Address	Phone, Fax & Email:
Customer Support Helitowcart BearPaw Helitowcart (Vanair inc)	860 Marie-Victorin St-Nicholas, Levis, Quebec, Canada, G7A 3S9	Tel:1 (418) 561-4512 Fax:1 (418) 836-4575 info@helitowcart.com

Helicopter Effectivity

This installation instruction applies to the following helicopter models:

Table 2 – Helicopter Model Effectivity

Make	Model	Transport Canada Type Certificate Data Sheet
Eurocopter	AS 350 D	H-83
Eurocopter	AS 350 D1	
Eurocopter	AS 350 B	
Eurocopter	AS 350 B1	
Eurocopter	AS 350 B2	
Eurocopter	AS 350 B3	
Eurocopter	AS 350 BA	
Eurocopter	AS 355 E	H-87
Eurocopter	AS 355 F	
Eurocopter	AS 355 F1	
Eurocopter	AS 355 F2	
Eurocopter	AS 355 N	



Installer Responsibilities

The installer shall ensure that the installation of the Helitowcart BearPaw does not conflict with any other part of the helicopter configuration. Technicians performing this installation should be familiar with A/C work and should have been familiarized with the different Helitowcart BearPaw system components prior to performing a first time installation. All steps in this procedure must be followed. Deviations from the procedures may result in potential structural failure or equipment malfunction and will result in a non-compliant installation.

INSTALLATION

BearPaw Installation

Reference Documentation:

- [1] Helicopter Maintenance Manual AS 350 or AS 355 as applicable.

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] as applicable to your helicopter model to allow a ground clearance of the skid in the area of the aft cross tube of approximately 1 ½" (38mm);

Note: The BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) can be installed with or without the skid tube wear shoes.

Step 2: IceBlade Installation

Note: The BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) can be installed with or without the IceBlades

- With IceBlade Option
- Install ice blades (Qty: 4) (Iceblades P/N 314-0005-15) under BearPaw pad as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A.
- Secure ice blades with washer (Washer P/N 263-0001-17) and nut (P/N 262-0001-17).

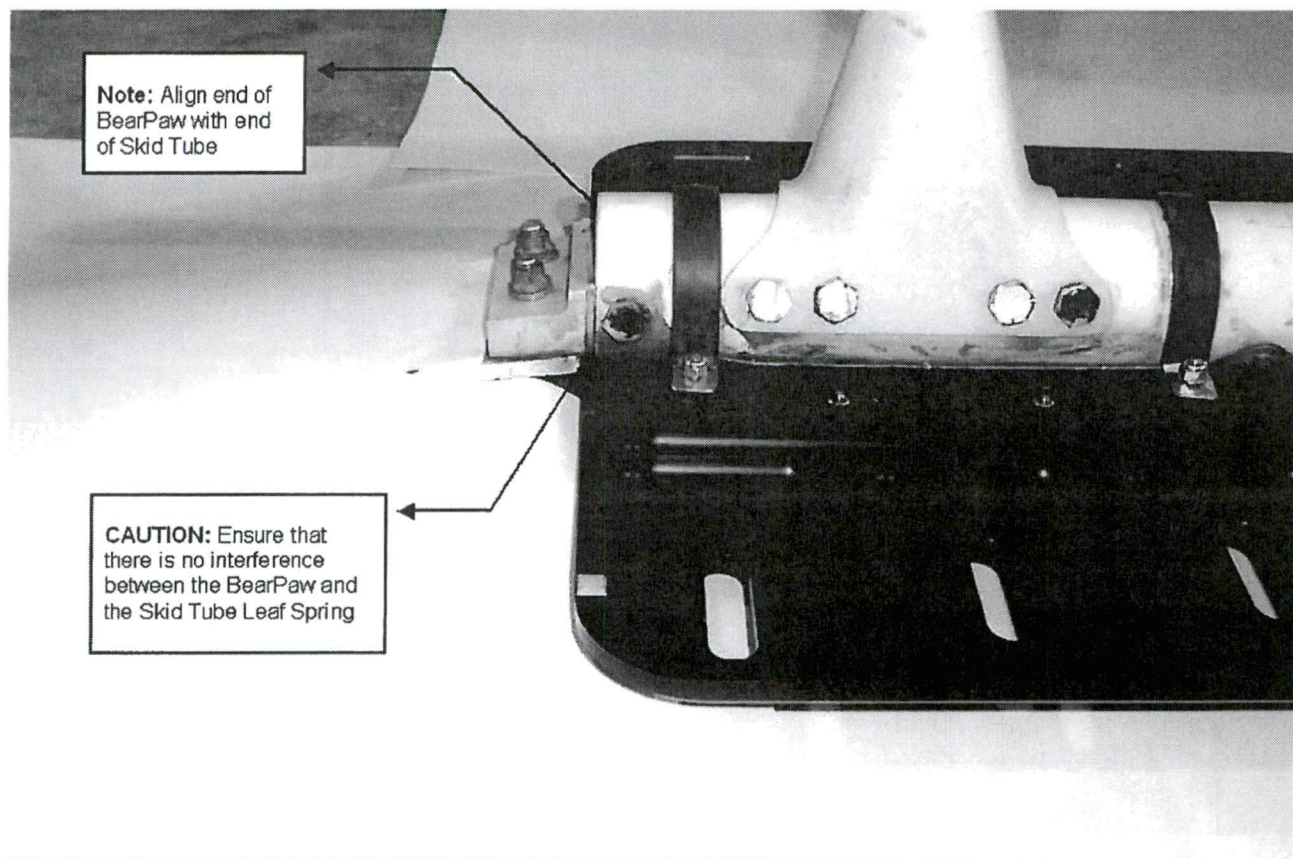
Step 3: BearPaw Installation

- Position the BearPaw under the skid as shown in Figure 1 with narrow edge pointing forward.
- Insert washers (P/N 263-0001-17) through all six bolts: 6x(261-0001-17);
- Insert bolts (P/N 261-0001-17) and washer (Washer P/N 263-0001-17) through BearPaw pad as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A;
- Insert filler blocks (P/N314-0012-01) as per drawing (112-0002-00 or 112-0002-00-S) provided at Annex A;

Note: The use of filler blocks (P/N314-0012-01) may be replaced or complemented by the use of washers (P/N 263-0001-17) to fill in the gap. Bolts (P/N 261-0001-17) may be replaced by longer or shorter AN4 bolts as required.

- Insert both U-shaped clips (P/N 314-0019-15) through bolts: 6x(261-0001-17);
- Insert slotted clip supports (P/N 314-0007-15) through all six bolts. Position slotted clip supports with rounded edge toward helicopter skid;
- Insert washer (P/N 263-0001-17) & screw nuts (P/N 262-0001-17) for a tight fit. Max. torque on nuts 60 in.-lb;
- Remove helicopter from lift;
- Amend Weight & Balance records as required using data provided in Table 3.

Figure 1 – BearPaw Model BP350 (P/N 112-0002-00 or P/N 112-0002-00-S) - Alignment on Skid



BearPaw Removal

Step 1: Helicopter Preparation

- Ensure the helicopter is safe for maintenance;
- Lift the helicopter using the manufacturer recommended practice provided in Ref [1] to allow a clearance of the skid in the area of the aft cross tube of approximately 1 ½" (38mm);

Step 2: BearPaw Removal

- Remove nuts (P/N 262-0001-17), slotted clip support (P/N 314-0007-15) on U-shaped clips (P/N 314-0019-15),
- Remove washers (P/N 263-0001-17), U-shaped clips (P/N 314-0019-15), filler blocks (P/N 314-0012-01), and remove BearPaw pad (P/N 314-0018-01) or (P/N 314-0018-01-S Streamline);
- Inspect skid tubes to confirm serviceability
- If the skid tube shoes have been removed, re-install shoes as per reference [1];
- Complete installation by putting helicopter back to normal position by removing lift status;
- Amend Weight & Balance records as required using data provided in Table 3.

Weight & Balance

The following information should be used to amend the helicopter weight and balance information following the installation or removal:

Table 3 – Weight & Balance Data

Item	Weight	Lateral		Longitudinal	
		Arm	Moment	Arm	Moment
Helitowcart BearPaw Model BP350 (P/N 112-0002-00)	19,9 Lb 9,0 Kg	N/A	N/A	159,4 in. 404.9 cm	3172.0 in-lb 36.44 m-kG
Helitowcart BearPaw Model BP350 - <u>Streamline</u> (P/N 112-0002-00-S)	18,3 Lb 8,5 Kg	N/A	N/A	159,4 in. 404.9 cm	2917.0 in-lb 34.41 m-kG

Note: Weight and moment provided are for full kit installation.

Parts Lists

The Helitowcart BearPaw detailed parts list is as follow:

Table 4 – Parts List

Description	Qty	Part / Dwg No.	Additional Drawing Reference No./ Name
BearPaw Model BP350	1	112-0002-00	112-0002-00 / BearPaw Assembly, or 112-0002-00-S / Bear Paw Streamline Assembly
BearPaw pad ⁽¹⁾	1	314-0018-01	BearPaw BP350 – Pad (VNR106)
BearPaw pad streamline ⁽¹⁾	1	314-0018-01S	BearPaw BP350 – Pad Streamline (VNR106-S)
U Shaped Clips	3	314-0019-15	BearPaw BP350 - U Shaped Clips (VNR107)
Slotted Clip Support	6	314-0007-15	BearPaw - Slotted Clip Support (VNR089)
Filler blocks 1/4"	6	314-0012-01	BearPaw – Filler block ¼" (VNR099)
Bolts	6	261-0001-17	Bolt- AN4-14
Nuts	6	262-0001-17	Nut- MS20365-428
Washers	12	263-0001-17	Washer – AN960-416
Shrink	3	314-0021-01	BearPaw – Shrink Specifications & Install.(1"x6.25")
IceBlade Option Model OIB	4	314-0005-15	IceBlade Assembly (VNR086)
Nuts	8	262-0001-17	Nut- MS20365-428
Washers	8	263-0001-17	Washer – AN960-416

Note (1): Use pocked shaped BearPaw Pad P/N 314-0018-01 for assembly P/N 112-0002-00. Use streamlined Pad P/N 314-0018-01-S for assembly P/N 112-0002-00-S as applicable.

INSPECTION

Life Limited Items

Three are no life limited items for the Helitowcart BearPaw.

Pre-Flight

Before each flight the following items should be inspected:

- Check that attachment bolts are installed and secured,
- Check that BearPaws are free from visible damage,
- If damage is found, verify allowable damage according to:
Tables 5 & 6 – Tolerances for cracks & wear and
Annex B – BearPaw Allowable Damage Drawing 314-0018-01 (VNR-106) page 2 of 2 for Pocket pad
or 314-0018-01-S (VNR106-S) page 3 of 3 for Streamlined Pad.

Periodic Inspection Schedule

- The Helitowcart BearPaw shall be inspected every 500 flying hours or yearly whichever comes first.
- The Helitowcart BearPaw can be inspected concurrently with the helicopter landing gear inspection.
- Recommended tolerance for performance of inspection is +/- 10% of the 500 hours period.
- Following an inspection, subsequent interval shall be adjusted to meet the original schedule from time of inspection. If inspection is performed earlier than the 10% tolerance, then following inspections shall be scheduled not to exceed the above mentioned tolerance.

500 Hour or Yearly Inspection Details

- Remove Helitowcart BearPaw: See Section "BearPaw Removal",
- Inspect all parts for damage & wear. See table & figure below for allowable damage,
- Replace all damaged parts,
- Replace parts worn beyond the tolerances indicated below.
- See Tolerances for cracks & wear:
Tables 5 & 6 – Tolerances for cracks & wear and
Annex B – BearPaw Allowable Damage Drawing 314-0018-01 (VNR-106) page 2 of 2 for Pocket pad
or 314-0018-01-S (VNR106-S) page 3 of 3 for Streamlined Pad.

Table 5 – Tolerances for Cracks & Wear / Pocket Pad 314-0018-01 (VNR 106)

Zone	Nominal Dimension (Inches)	Allowable Damage/Wear (Inches)	Cracks
A	0,50	0,050	
B	1,000	0,250	
C	0,375	0,075	<u>Pockets:</u> Cracks are acceptable in the Helitowcart BearPaw pocket areas to a maximum length of 0,5" provided they are 0,25" away from the stiffener radius change. Stop drill cracks with a 0,125" hole.
D	0,50	0,050	<u>Stiffeners:</u> NO cracks in stiffeners.

Table 6 – Tolerances for Cracks & Wear / Streamline Pad 314-0018-01-S (VNR 106-S)

Zone	Nominal Dimension (Inches)	Allowable Damage/Wear (Inches)	Cracks
A	0,50	0,050	
B	1,000; and 0.88	0,250	
C	0.273 to 0,348 (variable thickness)	0,075	<u>Pockets:</u> Cracks are acceptable in the pocket under the Helitowcart BearPaw to a maximum length of 0,5". Stop drill cracks with a 0,125" hole.
D	0,49 (thickness after radius)	0,075	No cracks in the radius
E	0,38	0,075	No cracks in the BearPaw contour

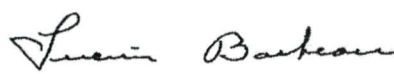
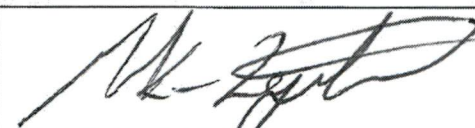
Overhaul Requirements

- Not applicable for the designated application of this device.

REVISIONS & APPROVAL**Revisions**

Date	Rev	Nature of Revisions
Nov 20, 2006	A	Initial issue
Jan 29, 2007	B	Minor editorials. Change to weight & Balance Data to reflect production model. Change in inspection schedule from 300 to 500 hours to match existing landing gear periodicity.
Feb 28, 2008	C	Introduction of new streamline BearPaw Pad configuration as alternate.
Aug 01, 2008	D	Modification of vent holes on the streamline pad
April 8, 2010	E	Correction to C of G data
December 21, 2012	F	Updated Pad Tolerances and Document identifications . Improved page set up for reader convenience.

Approval

Internal Approval :		
Helitowcart inc.	 Lucien Barbeau, President	Date: Dec 21, 2012
External Approval :		
Transport Canada	 Mirko Zgela, DAR #310	Date: Dec 21, 2012

Annex A

See: BearPaw Assembly, drawing no. (112-0002-00) for Pocket style pad or;
BearPaw Assembly, drawing no. (112-0002-00-S) for Streamline style pad

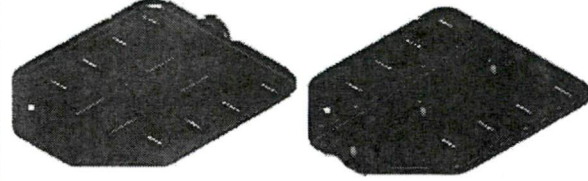
Annex B

See: BearPaw Pad, drawing no. 314-0018-01 (VNR106) page 2 of 2 for Pocket style pad or;
BearPaw Pad, drawing no. 314-0018-01-S (VNR106-S) page 3 of 3 for Streamline style pad.

Annex A

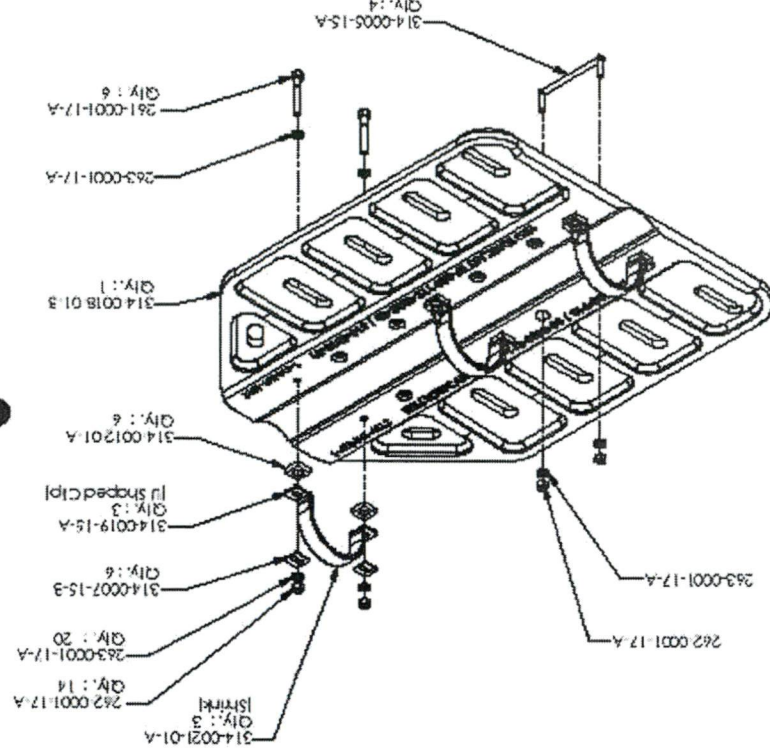
BearPaw Assembly, Drawing no. 112-0002-00.

No.	Qty.	Description	Part #	Rev #
1	1	BearPaw BP-350 - Pad	314-0018-01	B
2	3	BearPaw BP-350 - U shaped clip	314-0019-15	A
3	3	BearPaw BP-350 - Shank 1" x 6 1/4"	314-0021-01	A
4	4	BearPaw - Stuffed clip support	314-0007-15	B
5	6	BearPaw - Filter Block 1/4"	314-0012-01	A
6	4	BearPaw - Iceblade Assembly	314-0005-15	A
7	6	Bolt AN4-14A	261-0001-17	A
8	20	Washer AN60-416	263-0001-17	A
9	14	NUT MS20365-128	262-0001-17	A



Note: Iceblade assembly can be omitted from installation (Optional)

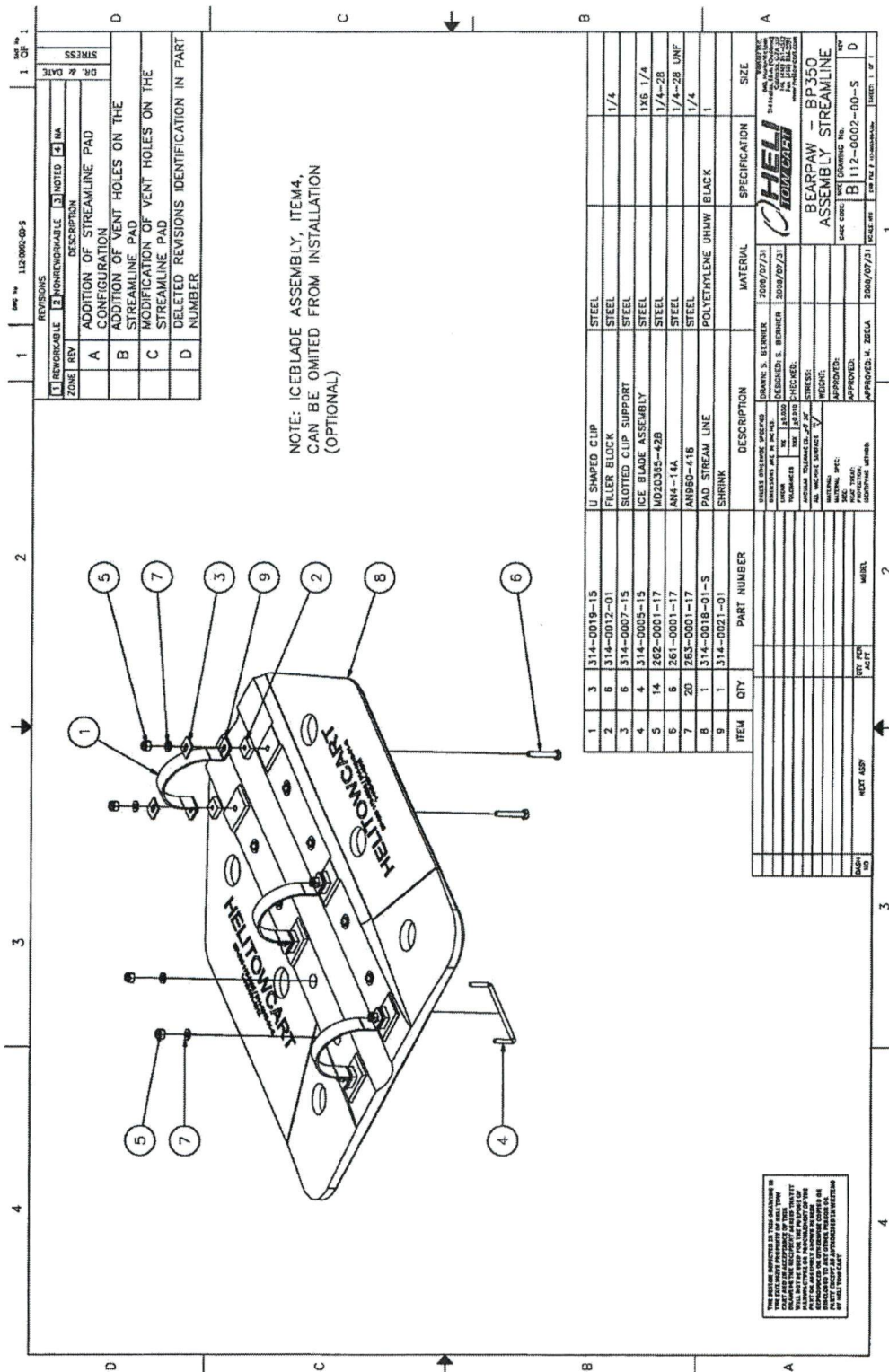
HELIX TOW CART	
Part #	Rev #
314-0020-00	1
314-0020-00	14
314-0020-00	112-0002-00
314-0020-00	112-0002-00



Rev #	Description	Date	By
1	Change bolt size	20-Nov-00	CL
2	Final issue	20-Sep-00	CL

Annex A

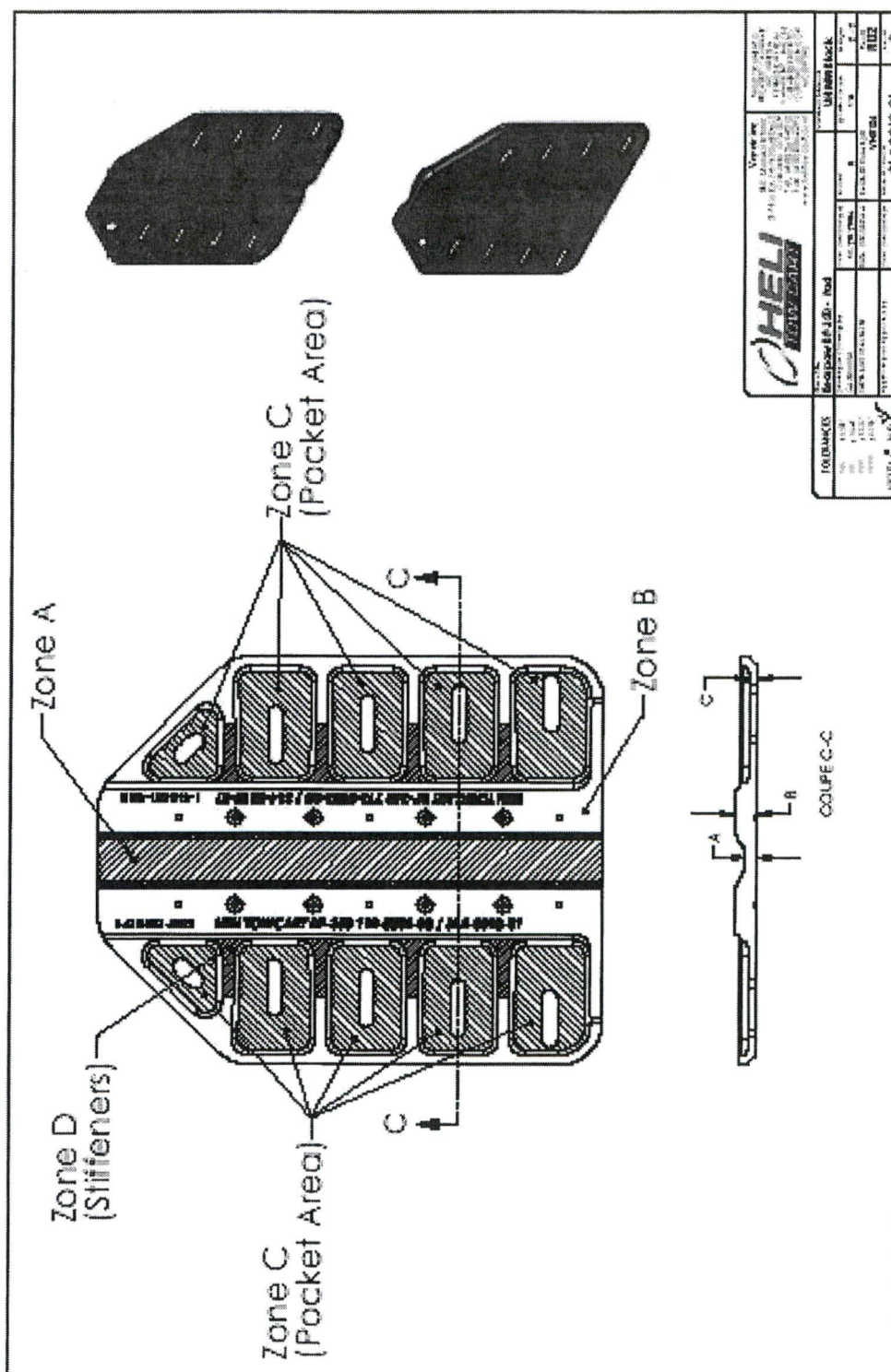
BearPaw Assembly, Drawing no. P/N 112-0002-00-S.





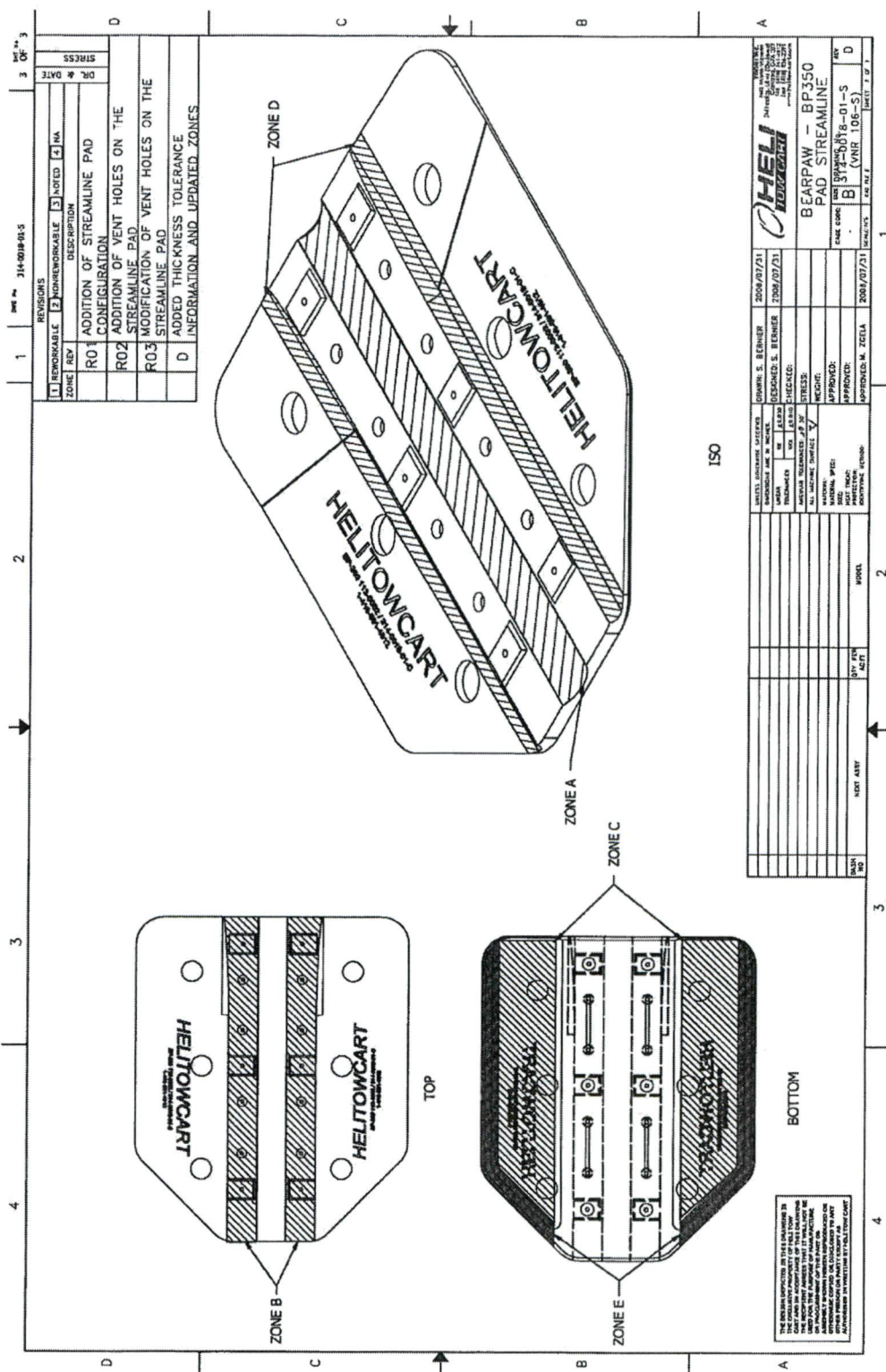
Annex B

BearPaw Pad, Drawing no. 314-0018-01 (VNR106) Page 2 of 2 Pocket Style Pad.



Annex B

BearPaw Pad, Drawing no. 314-0018-01-S (VNR106-S) Page 3 of 3 Streamline Style Pad.



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3

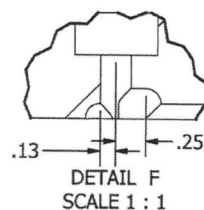
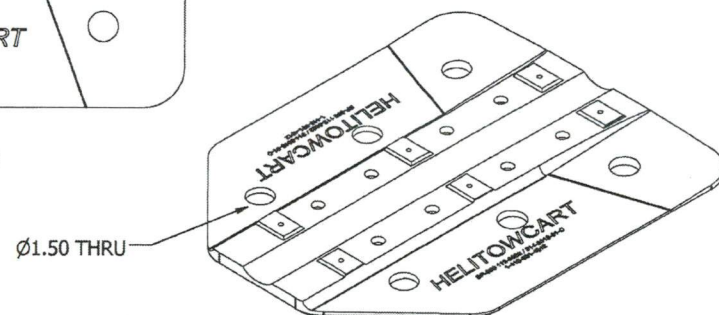
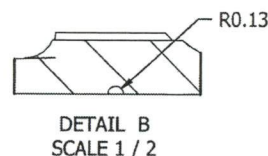
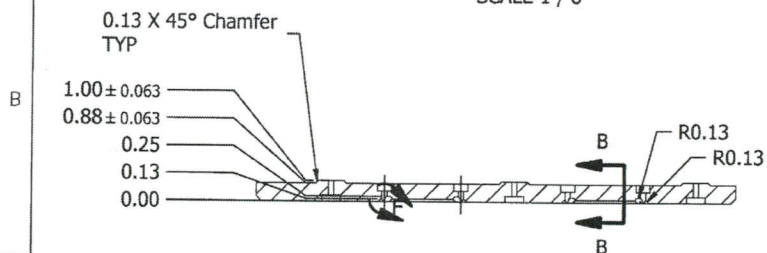
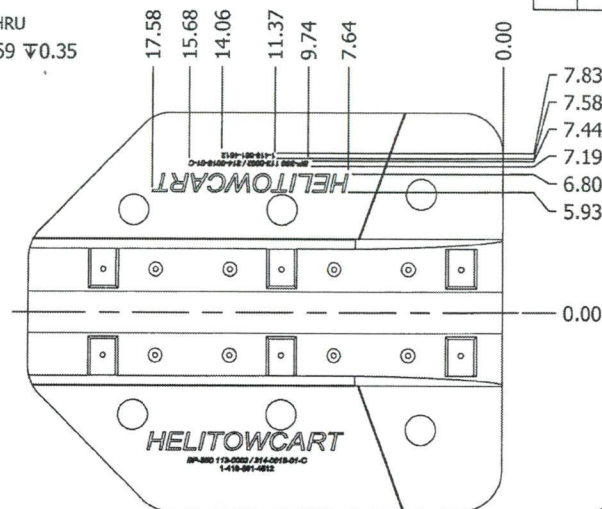
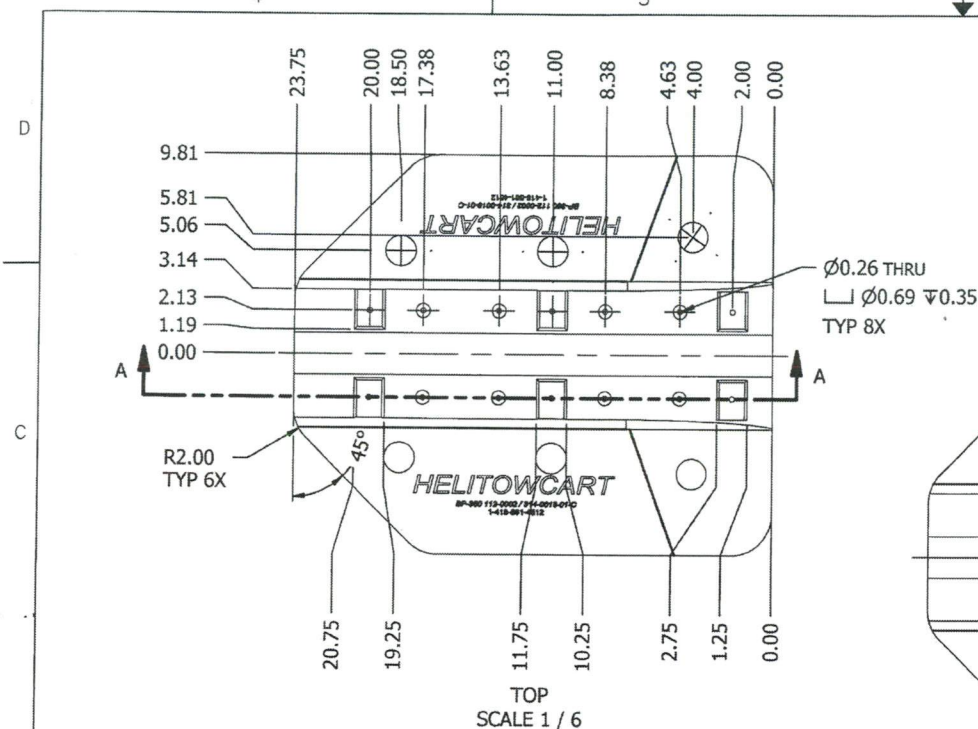
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DWG No 314-0018-01-S

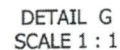
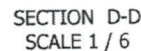
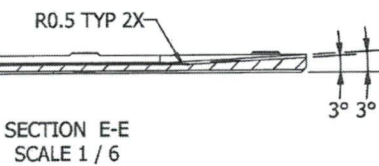
SHEET No
1 OF 3

REVISIONS				DR. & DATE	STRESS				
1	REWORKABLE	2	NONREWORKABLE			3	NOTED	4	NA
ZONE	REV	DESCRIPTION							
	R01	ADDITION OF STREAMLINE PAD CONFIGURATION							
	R02	ADDITION OF VENT HOLES ON THE STREAMLINE PAD							
	R03	MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD							
	D	ADDED THICKNESS TOLERANCE INFORMATION AND UPDATED ZONES							



THE DESIGN DEPICTED IN THIS DRAWING IS THE EXCLUSIVE PROPERTY OF HELI TOW CART AND IN ACCEPTANCE OF THIS DRAWING THE RECIPIENT AGREES THAT IT WILL NOT BE USED FOR THE PURPOSE OF MANUFACTURE OR PROCUREMENT OF THE PART OR ASSEMBLY SHOWN HEREIN REPRODUCED OR OTHERWISE COPIED OR DISCLOSED TO ANY OTHER PERSON OR PARTY EXCEPT AS AUTHORIZED IN WRITING BY HELI TOW CART

1		1	314-0018-01-S	PAD STREAM LINE	POLYETHYLENE UHMW	BLACK	1.00
ITEM		QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE
				UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES TOLERANCES LINEAR TOLERANCES ANGULAR TOLERANCES ALL MACHINE SURFACES MATERIAL SPEC: SIZE: HEAT TREAT: PROTECTION: IDENTIFYING METHOD:	DRAWN: S. BERNIER 2008/07/31 DESIGNED: S. BERNIER 2008/07/31 CHECKED: STRESS: WEIGHT: APPROVED: APPROVED: APPROVED: M. ZGELA 2008/07/31		 BEARPAW - BP350 PAD STREAMLINE CAGE CODE: B 314-0018-01-S (VNR 106-S) SCALE: NTS
						DRAWING No. 314-0018-01-S (VNR 106-S) SHEET: 1 OF 3	
DASH NO	NEXT ASSY		QTY PER ACFT	MODEL			



REVISIONS							DATE	STRESS
1	REWORKABLE	2	NONREWORKABLE	3	NOTED	4		
ZONE	REV	DESCRIPTION						
	R01	ADDITION OF STREAMLINE PAD CONFIGURATION						
	R02	ADDITION OF VENT HOLES ON THE STREAMLINE PAD						
	R03	MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD						
	D	ADDED THICKNESS TOLERANCE INFORMATION AND UPDATED ZONES						

DASH	NEXT ASSY	QTY PER ACT	MODEL

 HELI WIND CART		544 Locust, Lulu (Guelph) Canada, ONA 2H7 Tel: (416) 541-3333 Fax: (416) 541-2291 www.heli.com	
BEARPAW - BP350 PAD STREAMLINE			
CAGE CODE:	SIZE	DRAWING NO.	REV
	B	314-0018-01-S (VNR 106-S)	D
SCALE: NTS	CAD FILE #	SHEET: 2 OF 3	

BEARPAW - BP350
PAD STREAMLINE


DR. & DATE
STRESS



ISO

BOTTOM

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				UNLESS OTHERWISE SPECIFIED DIMENSIONS ARE IN INCHES.		DRAWN: S. BERNIER		2008/07/31		 HELI TOUG CART Vemuri Int., 801, Vemuri Complex 8th Floor, 1st Main, Chaitanya Nagar, Hyderabad - 500075 Tel: (416) 51-4519 Fax: (416) 51-2971 www.helietoug.com	
				LINEAR TOLERANCES: XX ± 0.030 XXX ± 0.010		DESIGNED: S. BERNIER		2008/07/31			
				ANGULAR TOLERANCES: $\pm 0.30^\circ$		CHECKED:					
				ALL MACHINE SURFACE <input checked="" type="checkbox"/>		STRESS:					
						WEIGHT:				BEARPAW - BP350 PAD STREAMLINE CASE CODE: B DRAWING: 008-01-S REV D SIZE: 3/4" - 008-01-S (VNR 106-S) SCALE: mm PLOT: 1:1 SHEET: 1 OF 3	
				MATERIAL:		APPROVED:					
				MATERIAL SPEC:		APPROVED:					
				SIZE:		APPROVED: M. ZGELA		2008/07/31			
				HEAT TREAT:							
				PROTECTION:							
				IDENTIFYING METHOD:							
DASH NO		NEXT ASSY		QTY PER ACT		MODEL					

HEL!
TOW CART

BEARPAW — BP350
PAD STREAMLINE

CASE CODE:	SIZE: B	DRAWING NO: 314-0018-01-S (VNR 106-S)	REV D
SCALE: NTS	CAD FILE #	SHEET: 3 OF 3	

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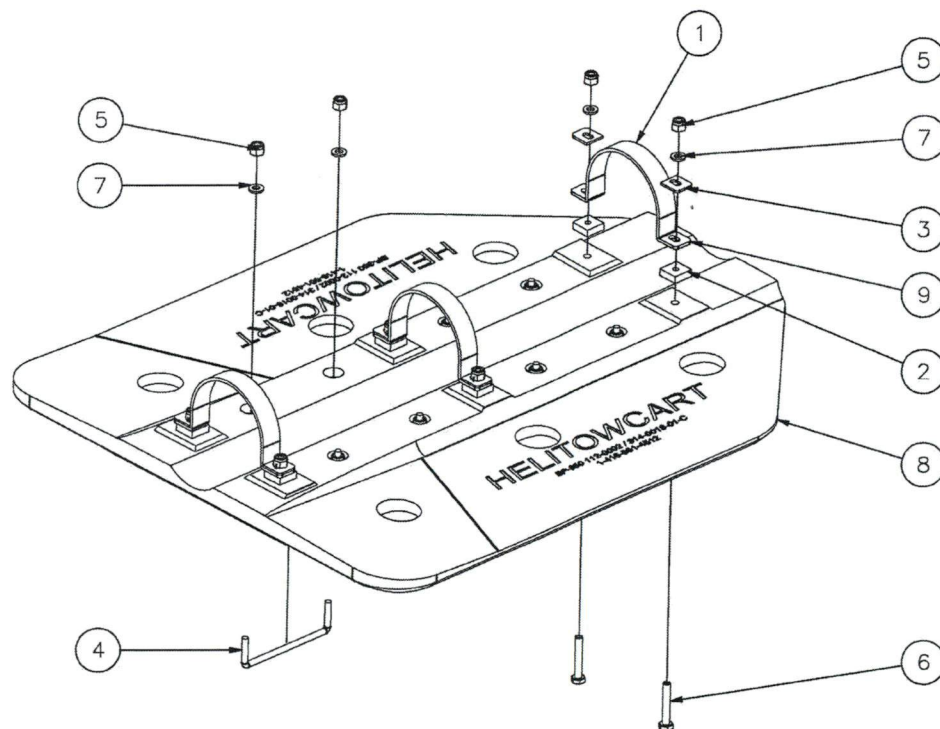
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DWG No 112-0002-00-S

1 OF 1


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ZONE	REV	DESCRIPTION						
	A	ADDITION OF STREAMLINE PAD CONFIGURATION						
	B	ADDITION OF VENT HOLES ON THE STREAMLINE PAD						
	C	MODIFICATION OF VENT HOLES ON THE STREAMLINE PAD						
	D	DELETED REVISIONS IDENTIFICATION IN PART NUMBER						



NOTE: ICEBLADE ASSEMBLY, ITEM4,
CAN BE OMITTED FROM INSTALLATION
(OPTIONAL)

1	3	314-0019-15	U SHAPED CLIP	STEEL		
2	6	314-0012-01	FILLER BLOCK	STEEL		1/4
3	6	314-0007-15	SLOTTED CLIP SUPPORT	STEEL		
4	4	314-0005-15	ICE BLADE ASSEMBLY	STEEL		1X6 1/4
5	14	262-0001-17	MD20365-42B	STEEL		1/4-28
6	6	261-0001-17	AN4-14A	STEEL		1/4-28 UNF
7	20	263-0001-17	AN960-416	STEEL		1/4
8	1	314-0018-01-S	PAD STREAM LINE	POLYETHYLENE UHMW	BLACK	1
9	1	314-0021-01	SHRINK			
ITEM	QTY	PART NUMBER	DESCRIPTION	MATERIAL	SPECIFICATION	SIZE

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				UNLESS OTHERWISE SPECIFIED:		DRAWN: S. BERNIER		2008/07/31		 <div>Vendor Inc. 840, Maple-Victoria St-Helene, M-16 (Ouellet) Canada, Q7A 3J9 Tel: (418) 811-3112 Fax: (418) 811-2291 www.helitowcart.com</div>
				DIMENSIONS ARE IN INCHES:		DESIGNED: S. BERNIER		2008/07/31		
				LINEAR TOLERANCES:		CHECKED:				
				ANGULAR TOLERANCES: $\pm 0.25^\circ$		STRESS:				
				ALL MACHINE SURFACE <input checked="" type="checkbox"/>		WEIGHT:				
				MATERIAL:		APPROVED:				
				MATERIAL SPEC:		APPROVED:				
				SIZE:		APPROVED:				
				HEAT TREAT:		APPROVED: M. ZG		2008/07/31		
				FINISH:		SCALE: NTS		CAD FILE # 112-0002-00-S.dwg		
				IDENTIFYING METHOD:		SHEET: 1 OF 1				
DASH	NEXT ASSY	QTY PER ASST	MODEL					CAGE CODE: B 112-0002-00-S		REF: D

4

3

2

1



Department of Transport

Supplemental Type Certificate

This approval is issued to:

Helitowcart Inc.
860 Marie-Victorin
St-Nicholas, Levis, Quebec
Canada G7A 3S9

Number: SH06-24

Issue No.: 2

Approval Date: August 17, 2006

Issue Date: December 19, 2006

Responsible Office:

Quebec

Aircraft/Engine Type or Model:

See Continuation Sheet Page 2 of 2

Canadian Type Certificate or Equivalent:

See Continuation Sheet Page 2 of 2

Description of Type Design Change:

Installation of Helitowcart BearPaw Model BP350

Installation/Operating Data,
Required Equipment and Limitations:

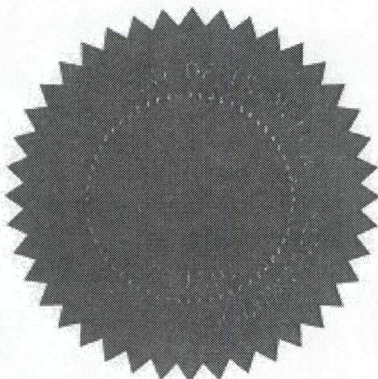
For the Robinson Models R44 and R44 II Helicopters:

Installation of Helitowcart Bear Paw Model BP350 is to be performed in accordance with TC approved Helitowcart Inc. Master Document List, Report: HTC-MDL-BP-R44-1000, Revision NC dated August 8, 2006, or later Transport Canada approved revision.

The BearPaw must be installed in accordance with Helitowcart Inc. Installation Instructions Document: "314-0011-00-A, BearPaw Model BP44, Installation Instructions - R44" as specified by Helitowcart Inc. Master Document List, Report: HTC-MDL-BP-R44-1000.

See Continuation Sheet Page 2 of 2

Conditions: This approval is only applicable to the type/model of aeronautical product specified therein. Prior to incorporating this modification, the installer shall establish that the interrelationship between this change and any other modification(s) incorporated **will not** adversely affect the airworthiness of the modified product.



Pierre G. Richard

Pierre G. Richard
For Minister of Transport



NOTE: THIS ADDENDUM SHALL REMAIN PART OF THE CERTIFICATE REFERRED TO THEREIN.

**Installation/Operating Data,
Required Equipment and Limitations (Cont'd):**

For the Eurocopter (formerly Aerospatiale) AS350 and AS355 Series Helicopters:

Installation of Helitowcart Bear Paw Model BP350 is to be performed in accordance with TC approved Helitowcart Inc. Master Document List, Report: HTC-MDL-BP-AS350/355-1000, Revision A dated November 22, 2006, or later Transport Canada approved revision.

The BearPaw must be installed in accordance with Helitowcart Inc. Installation Instructions Document: "314-0020-00-A, BearPaw Model BP350, Installation Instructions - AS350/355" as specified by Helitowcart Inc. Master Document List, Report: HTC-MDL-BP-AS350/355-1000.

Fleet Eligibility List		
Make	Model	Type Certificate Data Sheet
Robinson	R44	H-97
Robinson	R44 II	H-97
Eurocopter	AS 350 B	H-83
Eurocopter	AS 350 B1	H-83
Eurocopter	AS 350 B2	H-83
Eurocopter	AS 350 B3	H-83
Eurocopter	AS 350 BA	H-83
Eurocopter	AS 350 D	H-83
Eurocopter	AS 350 D1	H-83
Eurocopter	AS 355 E	H-87
Eurocopter	AS 355 F	H-87
Eurocopter	AS 355 F1	H-87
Eurocopter	AS 355 F2	H-87
Eurocopter	AS 355 N	H-87

- End -

United States of America
Department of Transportation -- Federal Aviation Administration

Supplemental Type Certificate
IMPORT

Number SR02432NY

This certificate issued to Helitowcart (Vanair Inc.)
860 Marie-Victorin
Saint-Nicolas, Levis, Quebec
Canada G7A 3S9

*certifies that the change in the type design for the following product with the limitations and conditions therefor as specified hereon meets the airworthiness requirements of * of the * Regulations.*

Original Product - Type Certificate Number: * * See Approved Model List AML No. SR02432NY
for list of approved aircraft models, applicable
Make: * airworthiness regulations, and required documents.
Model: *

Description of Type Design Change:

Installation of Helitowcart Bear Paw Model BP350 in accordance with Helitowcart Inc. Master Document List, Report HTC-MDL-BP-R44-1000, Rev. NC, dated August 8, 2006, or later Transport Canada approved revision.

Limitations and Conditions:

1. Instructions for Continued Airworthiness documents specified in AML SR02432NY or later Transport Canada accepted revisions, are required with this installation.
2. The Installer must determine whether this design change is compatible with previously approved modifications.
3. If the holder agrees to permit another person to use this certificate to alter a product, the holder must give the other person written evidence of that permission.

This certificate and the supporting data which is the basis for approval shall remain in effect until surrendered, suspended, revoked or a termination date is otherwise established by the Administrator of the Federal Aviation Administration

Date of application: March 26, 2007

Date reissued:

Date of issuance: July 20, 2007

Date amended:



By direction of the Administrator

James E. Delmonico
(Signature)

for: Anthony Socias
Manager, New York Aircraft Certification Office

(Title)

Any alteration of this certificate is punishable by a fine of not exceeding \$1,000, or imprisonment not exceeding 3 years, or both.

FAA APPROVED MODEL LIST (AML) NO. SR02432NY
HELITOWCART (VAN AIR, INC.)
FOR
INSTALLATION OF BEAR PAWS

Original Issue Date: July 20, 2007

PART	REGULATION	MAKE	MODEL	TCDS	REQUIRED DOCUMENTATION		AML AMENDMENT DATE
					INSTALLATION INSTRUCTIONS	INSTRUCTIONS for CONTINUED AIRWORTHINESS	
27	Federal Aviation	Eurocopter France	AS350B, BI, B2, B3, BA, D, DI	H9EU	Helitowcart Inc. Installation Instructions - AS350/355, Bear Paw Model BP350, document no. 314-0200-00-A, Rev. A, dated November 20, 2006	Contained within Installation Instructions, page 6 of document no. 314-0200-00-A.	
27	Federal Aviation	Eurocopter France	AS355E, F, FI, F2, N	H11EU	Helitowcart Inc. Installation Instructions - AS350/355, Bear Paw Model BP350, document no. 314-0200-00-A, Rev. A, dated November 20, 2006	Contained within Installation Instructions, page 6 of document no. 314-0200-00-A.	
27	Federal Aviation	Robinson Helicopter Co.	R44, R44 II	H11NM	Helitowcart Inc. Installation Instructions - R44, Bear Paw Model BP44, document no. 314-0011-00-A, Rev. A, dated June 12, 2006	Contained within Installation Instructions, page 5 of document no. 314-0011-00-A.	

FAA Approved: Anthony G. Socias
Anthony Socias
Manager,
New York Aircraft Certification Office

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
24	112 0002 00S-B	BP350 STREAMLINED	HTC-LNF- 110525-01 HTC-LNF-yyymmdd-seq
Includes:			
	SEE ATTACHED	EXCEL CHART	LN-
			LN-
			LN-
			LN-
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICE CAGES	IN BAGS
B	100%	" " DOCUMENTS	IN BAGS
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: N. BARBEAU			Date: 2011 05 25

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2011 05 25	24 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: S. Barbeau	Date: 2011 05 25
Comments: HTC-LNF-110525-01 -24		

[illegible]

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
9	112 0002 005-B	BP350 STREAMLINED	HTC-LNF- 101206-01 HTC-LNF-yymmdd-seq

Includes:

18	314 0018 01 C	BEARPAW PAD ^{STREAMLINE} w/HOSES	LN- 101127-01 JS
54	314 0019 15 A	J-SHAPED CLIP	LN- 081201-04
108	314 0007 15 B	SLOTTED CLIP SUPPORT	LN- 100315-01
72	314 0005 15 A	ICEBLADE ASS'Y	LN- 100316-01
108	314 0012 01 A	FILLER BLOCKS	LN- 100424-01 => 8 PAIRES = 96 G12 091208-01 => 1 PAIRE = 2 G12
108	261 0001 17 A	BOLTS (AN4-14A)	LN- 73445/14597 AIRCRAFT SPRUCE
252	262 0001 17 A	NUTS	LN- MS21044 N4 LOT 71322/717261 Aircraft spruce
360	263 0001 17 A	WASHERS	LN- 73384/V3912 Aircraft spruce

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B		" " DOCUMENTS	
C		ALL LN MATCH PARTS FOR LOT	
D		ALL COMPONENTS INTO BAGS	
E		Box APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: N. Bouteau

Date: 20101206

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2010 12 06	9 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: N. Bouteau	Date: 2010 12 06
Comments:		
HTC-LNF- 101206-01 à 09		
* Boite #7 : FILLER BLOCKS BATCH DIFF VOIR NOTE SI-HAUT.		

Traceability data

Qty	Part No.	Desc:	Lot number
2	112 0002 00S-B	BP350 STREAMLINED	HTC-LNF- 101014-01 HTC-LNF-yymmdd-seq
Includes:			
4	314 0018 01 C	BEARAW TAD + 6 HOLES STREAMLINED	LN- 100608-01
12	314 0019 15 A	U-SHAPED CLIP	LN- 081201-04
24	314 0007 15 B	SLOTTED CLIP SUPPORT	LN- 100315-01
16	314 0005 15 A	ICEBLADE ASS'Y	LN- 100316-01
24	314 0012 01 A	FILLER BLOCKS	LN- 091208-01
24	261 0001 17 A	BOLTS (AN4-14A)	LN- 73445/14557 AIRCRAFT SPRUCE SPECIALTY
56	262 0001 17 A	NUTS	LN- MS21044N4 AN305-42BA 71322/717261 AIRCRAFT SPRUCE
80	263 0001 17 A	WASHERS	LN- 72471/48272 AN960-416 AIRCRAFT SPRUCE

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B		" " DOCUMENTS	
C		ALL LN MATCH PARTS FOR LOT	
D		ALL COMPONENTS INTO BAGS	
E		BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: <i>DB</i>			Date: 2010. 10. 14

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2010 10 14	2 PAIRS	OK DB	OK DB	OK DB	OK DB	OK DB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: <i>D. Bailean</i>	Date: 2010 10 14
Comments:		
<p>HTC-LNF- 10 10 14 - 01 - 02</p>		

Traceability data

Qty	Part No.	Desc:	Lot number
4	112 0002 20 S-B	BP350 STREAMLINED	HTC-LNF- 100706 -01 HTC-LNF-yymmdd-seq
Includes:			
8	314 0018 01 C	BEARPAW TAD ^{STREAMLINE} 16 HOLES	LN- 10 06 08 - 01
24	314 0019 15 A	U-SHAPED CLIP	LN- 08 12 01 - 04
48	314 0007 15 B	SLOTTED CLIP SUPPORT	LN- 10 03 15 - 01
32	314 0005 15 A	ICEBLADE ASS'Y	LN- 10 03 16 - 01
48	314 0012 01 A	FILLER BLOCKS	LN- 09 12 08 - 01
48	261 0001 17 A	BOLTS (AN4-14A)	LN- 73445/14597 AIRCRAFT SPRUCE & SPECIALTY
112	262 0001 17 A	NUTS	LN- MS21044N4 AN365-428A 71322/717261 AIRCRAFT SPRUCE
160	263 0001 17 A	WASHERS	LN- AN960-416 AIRCRAFT SPRUCE & SPECIALTY LN 72477/U 8272

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B		" " DOCUMENTS	
C		ALL LN MATCH PARTS FOR LOT	
D		ALL COMPONENTS INTO BAGS	
E		BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: NPJ			Date: 2010-07-06

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2010-07-06	4 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: NPJ	Date: 2010 07 06
Comments:		
<p>HTC-LNF- 100706-01</p> <p>02</p> <p>03</p> <p>04* → Returned & Re-inspected & Parts Replaced & Re-issued</p> <p>See next page</p> <p>NPJ 2017 02 07</p>		

LN-110323-03

BP 350 U-clip

314 0019 15-A

Qty 164

LN-080807-01 NR

PART: 314-0019-15-A

U-SHAPED CLIPS

Qty: 22 (ORIGINAL LOT 100)

Traceability data

Qty	Part No.	Desc:	Lot number
1	112 0002 00 S-B	BP350 STREAMLINED	HTC-LNF- 100706-04A* HTC-LNF-yymmdd-seq
Includes:			
2	314 0018 01 C	BP AD STREAMLINED + 6 HOLES	LN- 100608-01
6	314 0019 15 A	U-SHAPED CLIPS	LN- 110323-03 x2 080807-01 x4
12	314 0007 15 B	SLOTTED CUP SUPPORT	LN- 100315-01
8	314 0005 15 A	ICEBLADE ASSY	LN- 100316-01
12	314 0012 01 A	FILLER BLOCKS	LN- 091208-01
12	261 0001 17 A	BOOTS (ANA-14A)	LN- 73445/14597 AIRCRAFT SPRUCE
.	262 0001 17 A	NUTS	LN- MS21044N4 AN365-428A 71322/717201 AIRCR. SPRUCE
	263 0001 17 A	WASHERS	LN- AN960-416 AIRCR. SPRUCE 72477/U 8272

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	→ ALREADY INSTALLED
B	1	DOCUMENTS	
C	1	ALL LN MATCH PARTS FOR LOT	
D	1	COMPONENTS INTO BAGS	
E	1	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: D. Baelecan			Date: 2017 02 07

Inspection Records

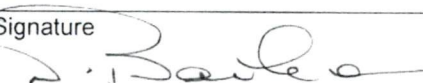
Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2017 02 07	1 PAIR	OK NB	OK NB	OK NB	OK NB	OK NB	
		↑		↑			
		installed		See Note below			

Release certificates issue

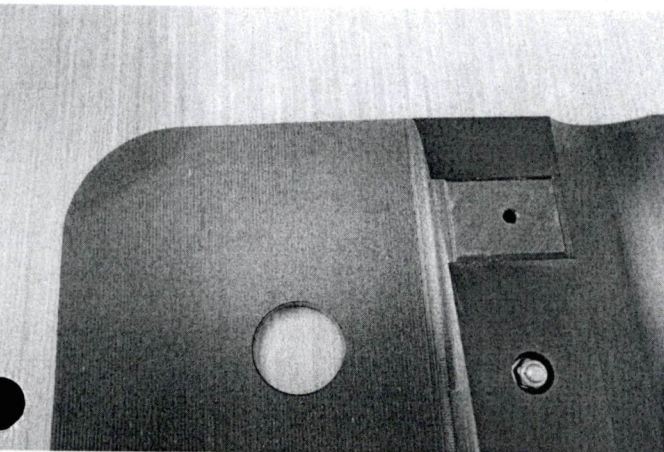
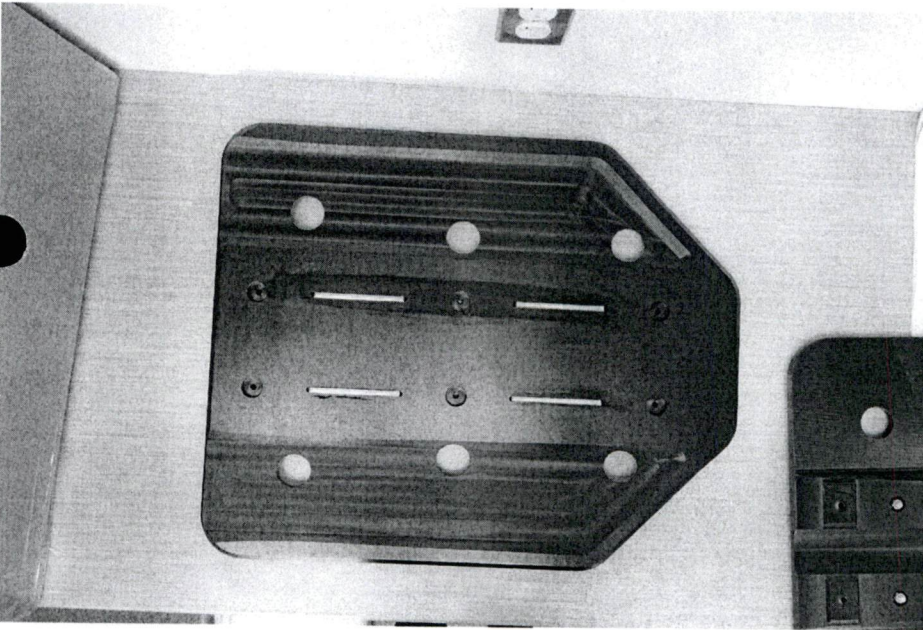
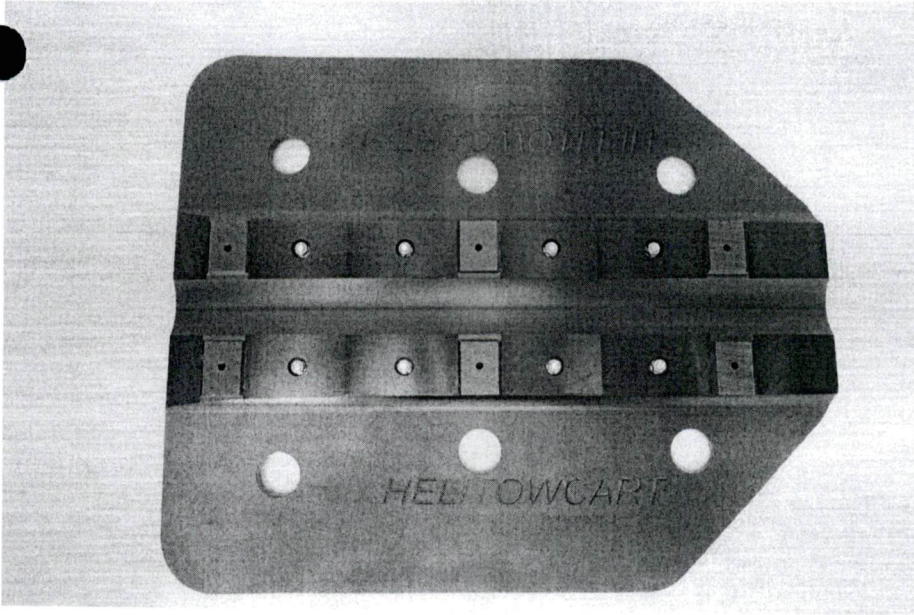
Release Certificates issued: yes no	By: P. Baelecan	Date: 2017 02 07
Comments:		
<p>*** THIS BP KIT WAS RETURNED BY A CUSTOMER.</p> <p>1 PAD REPAIRED: 1 NIP REMOVED</p> <p>ALL U-CLIPS REPLACED BY NEW BATCH.</p>		

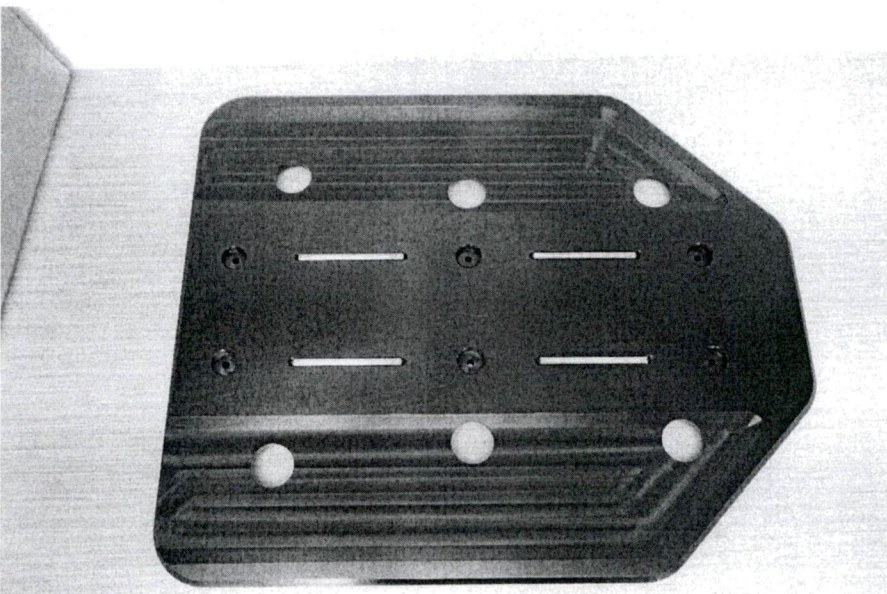
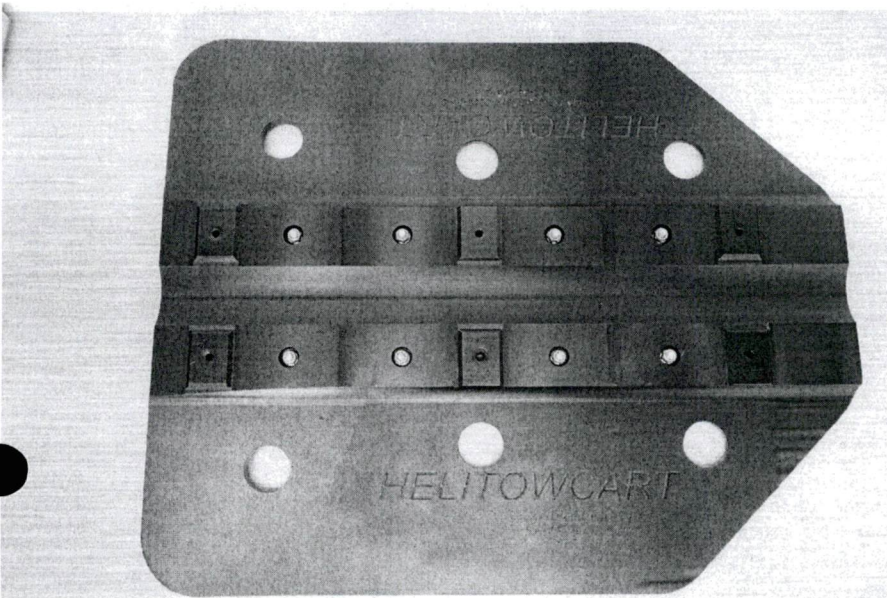
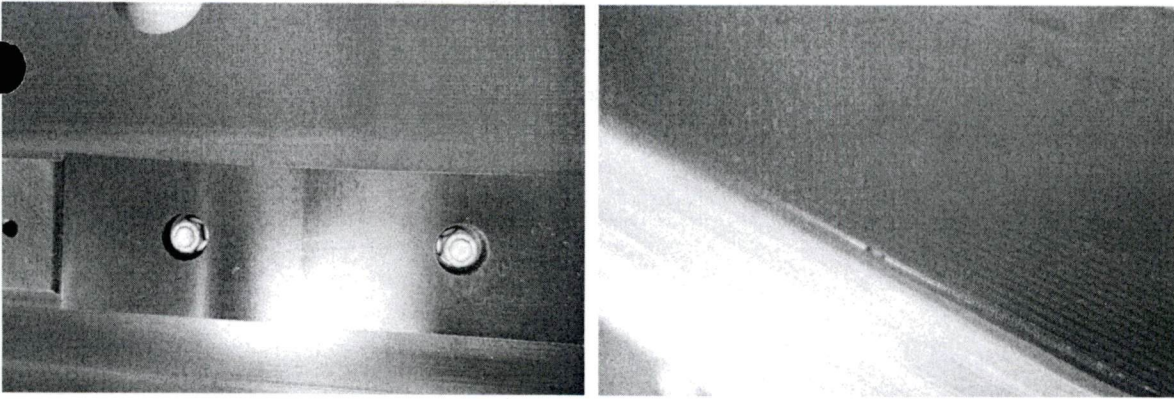
Authorized Release Certificate

1. Approving National Aviation Authority / Country Transport Canada			2. Authorized Release Certificate Form One		3. Form Tracking No. HTC-RC-100706-04A
4. Approved Organization Name & Address: Helitowcart (Vanair inc.) 877A Alphonse-Desrochers, St-Nicolas, Levis, Quebec, Canada G7A 5K6			5. Work Order/Contract/Invoice		
6. Item	7. Description	8. Part no.	9. Qty	10. Serial / Lot no.	11. Status / work
1	Helitowcart – BP350 BearPaw For Astar 350/355	HTC-MDL-BP350/355-1000_A 112-0002-00	2	HTC-LNF-100706-01	New
12. Remarks ***Streamlined bearpaw pads issued according to Service Bulletin 080811 rev.a from Helitowcart, i.e. with 6 vent holes per pad as per ECO no.3.. NB/080916					
Canada: Transport Canada Approved manufacturer no 27-06, Transport Canada STC no. SH06-24 United States: FAA STC no. SR02432NY					
13a. Certifies that the items identified above were manufactured in conformity to:		<input checked="" type="radio"/> Approved design data and are in condition for safe operation <input type="radio"/> Non approved design data specified in block 12.		14a. Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 has been performed in compliance with the Canadian Aviation Regulations <input type="radio"/> CAR 571.10 Maintenance release. <input type="radio"/> Other regulation specified in block 12.	
13b. Signature 		13c. Approved Organization. Number Inspector no: 001 / STC no SH06-24 Approved manufacturer no 27-06		14b. Signature	
13d. Name Nathalie Barbeau, Quality Manager		13e. Date (dd/mm/yyyy)		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mm/yyyy)	

Ref: Transport Canada: Form One

- 1- This document does not constitute authority to install the part.
- 2- Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.
- 3- Statements 13a & 14a do not constitute installation certification. In all cases the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown





Helitowcart – NON CONFORMITY report	F80-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Section A - Non conformity description

Product / Output: BP350 PAIR (RETURNED FROM CUSTOMERS)	NCR: 2011-02-04-nb-01 yyyy-mm-dd-initials#	
Product no: 112-0002-00	ASS no: —	
Non conformities: Customer damaged product	CARPAR no: —	
1) 2 x U-clips bent out of shape		
2) 1 x Pad - scratched	Supplier: —	
	Supplier ref no: —	
	Quantity rejected: 1 pair	
Initiated by:	Date:	Quantity in the lot:

Section B – Prescribed disposition

Decision & notes:	<input type="checkbox"/> Wait <input type="checkbox"/> Discard <input type="checkbox"/> Return to supplier		<input checked="" type="checkbox"/> Repair <input type="checkbox"/> Use as is <input type="checkbox"/> Derogation (=use as is with or without repair)
Actions	Resp	Verified by	
1) Repair & replace 2-clips	inexagr		
2) Polish pad and cut out ripped plastic f.e. inc.			
Prescribed by:	Date:		

Section C – Final verification

Decision & notes: Kit dis-assembled, repaired Pad, changed all U-clip supports & Reinspected
Closed by: D. Garcia Date: 20170207

Nathalie Barbeau

From: Nathalie Barbeau [nbarbeau@helitowcart.com]
Sent: February-04-11 11:18 AM
To: 'Dave Rintala'
Cc: 'info@helitowcart.com'
Subject: Credit for Returned bearpaw pair (F3640, Tahoe Heli-Course, Nevada)
Attachments: Damaged U-clips.jpg; Damaged Pad.jpg

Hello Dave,
I received the returned bearpaw 350 pair.

As I was inspecting it for re-stocking I discovered that components have been damaged.
Two 12 ga U-clips have been bent and one pad had a knife cut on it.
Also both pads were chipped.
Find attached a picture of the damaged U-clips and of the damage on pads.

I will take the bearpaws back of course, but I have to reduce the credit to issue as I cannot sell this pair as is.

I will have to get the U-clips repaired and if not satisfying have new ones made to replace the damaged ones. I will also have to attempt to repair the damaged pad (see picture). The second pad also had a rough abrasion on it.

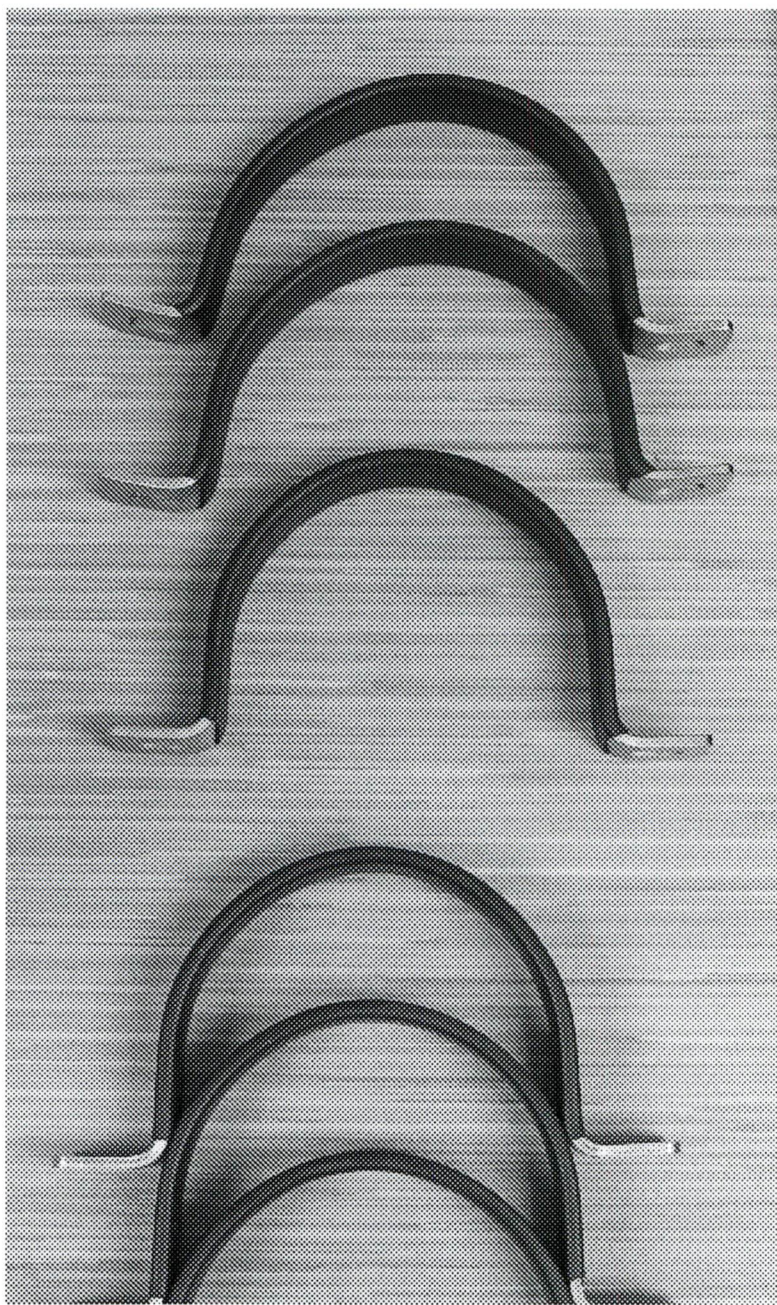
So we will deduct \$360 from the credit. This is our cost for the custom repair work and also for the fact that I cannot resell this pair as brand new due to the chip repair on the edge that cannot be fully brought back to standard.

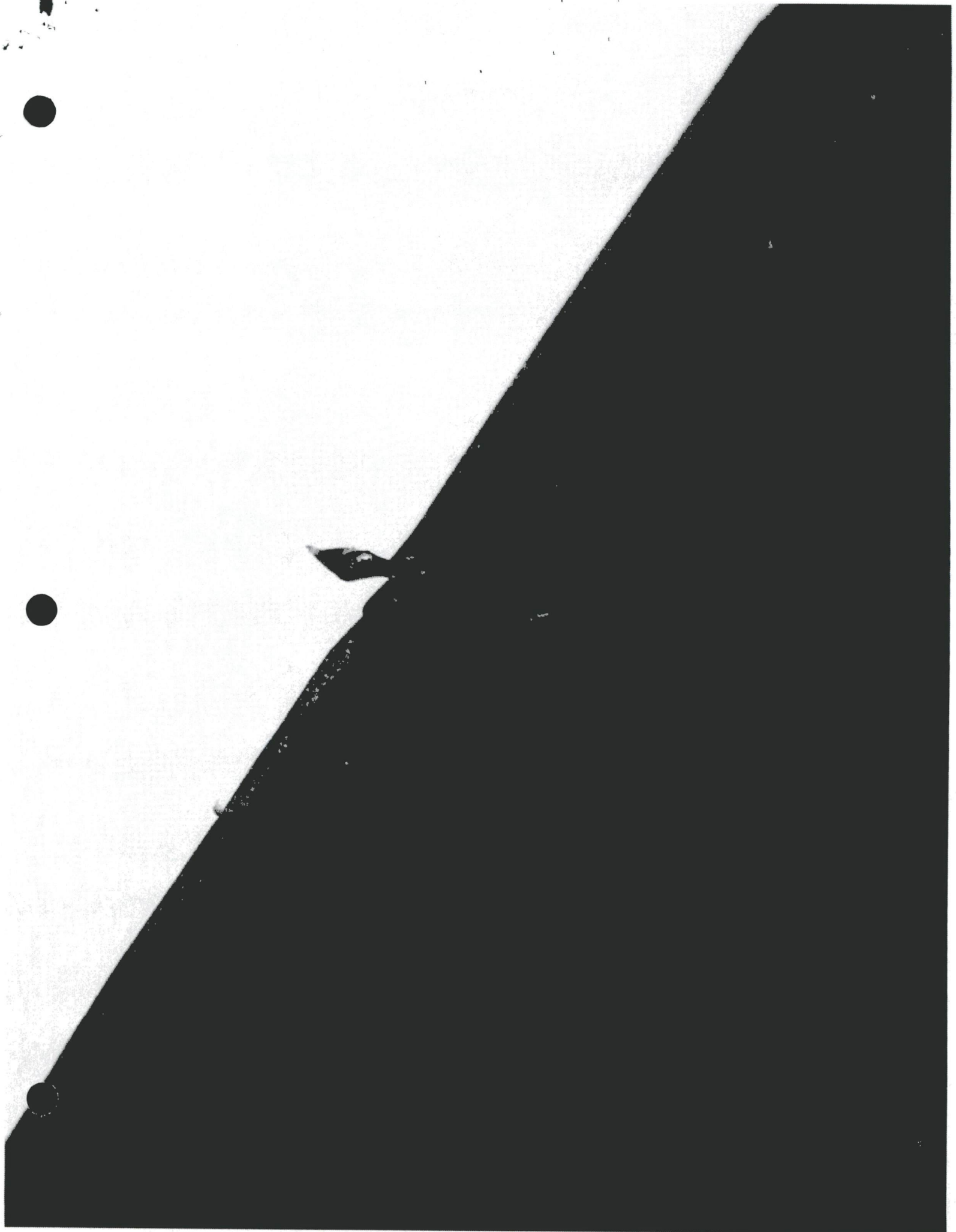
Very sorry for this but I really have no choice.
My accountant will issue the credit today and will email it to you.

Best Regards,


Ms Nathalie Barbeau
VP Commercial Affairs

Helitowcart (Vanair inc.)
877A Alphonse-Desrochers
St-Nicolas, Levis, Qc
Canada, G7A 5K6
Tel: +1.418.561.4512
Fx : +1.418.836.4575
nbarbeau@helitowcart.com
info@helitowcart.com
www.helitowcart.com





Authorized Release Certificate

1. Approving National Aviation Authority / Country Transport Canada			2. Authorized Release Certificate Form One		3. Form Tracking No. HTC-RC-100706-04
4. Approved Organization Name & Address: Helitowcart (Vanair inc.) 860, St-Nicolas, Levis, Quebec, Canada G7A 5K6			5. Work Order/Contract/Invoice Invoice 3640 David Rintala, Tahoe Heli Source -HeliTahoe, Nevada		
6. Item	7. Description	8. Part no.	9. Qty	10. Serial / Lot no.	11. Status / work
1	Helitowcart - BP350 BearPaw For Astar 350/355	HTC-MDL-BP350/355-1000_A 112-0002-00	2	HTC-LNF-100608-01	New
<p style="text-align: center; color: blue; font-size: 1.2em;"> <i>See NCR 2011-02-04 Helitao</i> </p>					
12. Remarks ***Streamlined bearpaw pads issued according to Service Bulletin 080811 rev.a from Helitowcart, i.e. with 6 vent holes per pad as per ECO no.3.. NB/080916					
Canada: Transport Canada Approved manufacturer no 27-06, Transport Canada STC no. SH06-24 United States: FAA STC no. SR02432NY					
13a. Certifies that the items identified above were manufactured in conformity to:		<input checked="" type="radio"/> Approved design data and are in condition for safe operation <input type="radio"/> Non approved design data specified in block 12.		14a. Certifies that unless otherwise specified in block 12, the work identified in block 11 and described in block 12 has been performed in compliance with the Canadian Aviation Regulations <input type="radio"/> CAR 571.10 Maintenance release. <input type="radio"/> Other regulation specified in block 12.	
13b. Signature 		13c. Approved Organization. Number Inspector no: 001 / STC no SH06-24 Approved manufacturer no 27-06		14b. Signature	
13d. Name Nathalie Barbeau, Quality Manager		13e. Date (dd/mm/yyyy) 07/12/2010		14c. Approved Organization Number	
				14d. Name	
				14e. Date (dd/mm/yyyy)	

Ref: Transport Canada: Form One

- 1- This document does not constitute authority to install the part.
- 2- Installers working in accordance with the national regulations of a country other than that specified in block 1 must ensure that their regulations recognize certifications from the country specified.
- 3- Statements 13a & 14a do not constitute installation certification. In all cases the technical record for the aircraft must contain an installation certification issued in accordance with the applicable national regulations before the aircraft may be flown

Traceability data

Qty	Part No.	Desc:	Lot number
3	112 0002 00 S-B	BP350 STREAMLINED	HTC-LNF- 100608-01 HTC-LNF-yymmdd-seq

Includes:

6	314-0018-01-C	BEARPAW PAD ^{STREAMLINED} d 6 HOLES	LN- 100608-01 (BATCH3)
18	314-0019-15-A	U-SHAPED CLIP	LN- 081201-04
36	314-0007-15-B	SLOTTED CLIP SUPPORT	LN- 100315-01
24	314-0005-15-A	ICEBLADE ASS'Y	LN- 100316-01
36	314-0012-01-A	FILLER BLOCKS	LN- 091208-01 (BATCH2)
36	261-0001-17-A	BOLTS (AN4-14A)	LN- 73445/14537 Aircraft Supply Lot 71822/717201
84	262-0001-17-A	NUTS	LN- MS 21044 N4 / AN 365-428A Lot 72477/08272
120	263-0001-17-A	WASHERS	AN960-416 / Lot 72477/08272

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICE BLADES	
B		" " DOCUMENTS	
C		ALL LN MATCH PARTS FOR LOT	
D		ALL COMPONENTS INTO BAGS	
E		Box APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: <i>ND</i>			Date: 2010.06.08

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2010.06.07	3 PAIRS	<i>OK NB</i>	<i>OK NB</i>	<i>OK NB</i>	<i>OK NB</i>	<i>OK NB</i>	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: <i>D. Dorian</i>	Date: 100608
Comments: HTC-RC-100608-01 -02 -03		

Traceability data

Qty	Part No.	Desc:	Lot number
1 PAIR	112.0002.00.B	BP 350 (1 st MODEL) BEARPAW ASSY	HTC-LNF- 090522-01 HTC-LNF-yyymmdd-seq

Includes:

2	314.0018.01 B	BEARPAW PAD	LN- 061115-06	FIRST LOT OF EACH EVER MADE.
6	314.0019.15 A	U-SHAPED CLIPS	LN- 061114-05	
12	314.0007.15 B	SLOTTED CLIP SUPPORT	LN- 060905-02	
8	314.0005.15 A	ICEBLADE ASSY	LN- 060905-01	
12	314.0012.01 A	FILLER BLOCKS	LN- NON DISP. (1 st BATCH)	NON DISP. (1 st BATCH) PAIR U-CLIPS: 68222/71644 NON DISP SUR ICEBLADE PAIR U-CLIPS: 70686/NAS1149F 0463P
12	261.0001.17 A	BOLTS	LN- 67519-03	
28	262.0001.17 A	NUTS	LN- NON DISP SUR ICEBLADE	
40	263.0001.17 A	WASHERS	LN- NON DISP SUR ICEBLADE	

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B		PRESENCE OF DOCUMENTS	
C		ALL LN MATCH PARTS FOR LOT	
D		ALL COMPONENTS INTO BAGS	
E		BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: D. Baran			Date: 090522

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Not
090522	1	OK AB	OK DB	OK DB	OK DB	OK DB	

Audit TC 2009

Release certificates issue

Release Certificates issued: yes no	By: D. Baran	Date: 090522
Comments:		
THIS PAIR IS MADE OF THE FIRST PARTS MADE. THIS KIT (PADS, U-CLIPS, SLOTTED CLIP SUPPORTS, FILLER BLOCKS & ICEBLADES) WAS USED FOR THE FIRST ASSY ON HELI. PART OF VALIDATION PROCESS (SUCCESSFUL). THIS EXPLAIN COMPONENTS P/N WITH LOT NO DATING FROM 2006. NOTE: AT THE TIME LOT NO WERE NOT RECORDED FOR FILLER BLOCKS, BOLTS, NUTS & WASHERS. 090522-01		
ALL COMPONENTS & ASSY MEET SPECIFICATIONS / DP 090522		

NOTE1: 1^{re} GÉNÉRATION DE ICEBLANES N'ÉTAIENT PAS
PASSÉES À L'ACIDE

NOTE2: 1^{re} MODÈLE DE PAD ÉTAIT MAT EN DESSOUS.

— = AUCUN IMPACT QUALITÉ —
CECI SONT NOTES POUR SE SOUVENIR DE CETTE
FAIRE SEULEMENT.

NIS 2009.05.28

Traceability data

Qty	Part No.	Desc:	Lot number
1 Pair	112.0002.00.B.S	BP350 STREAMLINED w/6 HOLES	HTC-LNF- 090521-01 HTC-LNF-yymmdd-seq

Includes:

2	314.0018.01(C)	BEARPAW (A) w/4 HOLES STREAMLINED	LN- 090504-01
6	314.0019-15 A	4. SHAPED CLIPS	LN- 080807-01
12	314.0007-15 B	SCOTTED CLIP SUPPORT	LN- 071206-01
8	314.0005-15.A	ICEBLADE ASSY	LN- 081201-05
12	314.0012-01.A	FILLER BLOCKS	LN- 080313-01
12	261.0001-17.A	BOOTS	LN- AN4-14A 72130/14471
28	262.0001-17.A	NUTS	LN- M521044M4 68222/71644A
40	263.0001-17.A	WASHERS	WAS L 49F0903P LOT: 70686

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B		PRESENCE OF DOCUMENTS	
C		ALL LN MATCH PARTS FOR LOT	
D		ALL COMPONENTS INTO BAGS	
E		BOX APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: P. Barthelemy Date: 090521-01

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
090521	1	OK	OK	OK	OK		

Release certificates issue

Release Certificates issued: yes no	By: <u>P. Barthelemy</u>	Date: <u>090521-01</u>
Comments:		
<p>1 pair 090521-01</p> <p>Corrected WRB info -</p> <p>* Replaced NDK rev E by NDK rev F</p> <p>2 INST 34... rev C by 314... rev E</p> <p><u>P. Barthelemy</u></p> <p>2010.04.10</p>		

Traceability data

Qty	Part No.	Desc:	Lot number
10 PAIRS	112.0002.00.B.5	BP350 STREAMLINED w/6 HOLES	HTC-LNF- 090505- 01 HTC-LNF-yymmdd-seq

Includes:

20	314.0018.01 (C)	BEARPAW PAD w/HOLES U-SHAPED CLIPS	LN- 090504-01
60	314.0019.15 A	U-SHAPED CLIPS	LN- 081201-03
120	314.0007.15 B	SLOTTED CUP SUPPORT	LN- 081201-06
80	314.0005.15-A	ICEBLADE ASSY	LN- 081201-05
120	314.0012.01-A	FILLER BLOCKS	LN- 080313-01
120	261.0001.17-A	BOOTS	LN- 080313-01
120	262.0001.17-A	NUTS	LN- 080313-01
240	263.0001.17 A	WASHERS	LN- 080313-01

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B	100%	PRESENCE OF DOCUMENTS (4)	
C	100%	ALL LN MATCH PARTS FOR LN	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: *D. Paulian*

Date: 09 05 05

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
090505	10 PAIRS	OK	OK	OK	OK	OK	

Release certificates issue

Release Certificates issued: yes no	By: <i>D. Paulian</i>	Date: 090505
-------------------------------------	-----------------------	--------------

Comments:

090505-01
a
-10

12 blocks 1/4" LN 091208-01

24x 1/8" blocks
as per 12x 1/4"

Derogation approved
by: *LN 090219 06:24*

HTC-LNF- 090505- 01

8 jan 09

1 x BP350 S. 6Hdes

↳ Show

Cm batcher que LF-090107-01

Att: 1 PAD Seulemeuf

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
5 PAIRS	112.0002-00B-S	BP 350 STREAMLINED w/HOLES	HTC-LNF- 090107-01 HTC-LNF-yyymmdd-seq

Includes:

10	314.0018-01 ©	BEARPAW PAD w/HOLES STREAMLINED	LN- 081217-01
30	314.0019-15 A	U-SHAPED CLIPS	LN- 081201-03
60	314.0007-15 B	SLOTTED CLIP SUPPORT	LN- 071206-01
40	314.0005-15 A	ICEBLADE ASSY	LN- 081201-05
60	314.0012-01 A	FILLER BLOCKS	LN- 080313-01
60	261.0001-17 A	BOOTS	LN- API AN4-14A / 63943-12437 (50) / 63905-38AG1 (10)
60	262.0001-17 A	NUTS	LN- SKJMS2104ANA + NO LOT NO LN/081231-01 FROM MANUF.
120	263.0001-17 A	WASHERS	LN- 0804000417 FROM SKJ: NAS1149F0463P

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B	100%	PRESENCE OF DOCUMENTS (4)	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	

Inspection Plan approved by: D. Badian

Date: 09 01 07

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
09 01 07	5 PAIRS	OK MB	OK PB	OK PB	OK MB	OK MB	

Release certificates issue

Release Certificates issued: <u>yes</u> no	By: <u>D. Badian</u>	Date: <u>090107</u>
--	----------------------	---------------------

Comments:

09 01 07 - 01
02
03
04
05

Traceability data

Qty	Part No.	Desc:	Lot number
1 PAIR	112-0002.00 B-5	BP350-S STREAMLINED ⁶ W/HOLES	HTC-LNF- 0812 B-01 HTC-LNF-yymmdd-seq
Includes:			
2	314-0018-01 (C)	BEARPAW PAD ^{w/HOLES} STREAMLINED	LN- 081217-01
6	314-0019-15 A	U-SHAPED CLIPS	LN- 080807-01
12	314-0007-15 B	SLOTTED CLIP SUPPORTS	LN- 071206-01
8	314-0005-15 A	ICEBLADE ASSY	LN- 081201-05
12	314-0012-01 A	FILLER BLOCKS	LN- 080313-01
12	261-0001-17 A	BOOTS	LN- AN4-14A :63943/12497
12	262-0001-17 A	NUTS	LN- MS21044 N4 /64171/713396
24	263-0001-17 A	WASHERS	LN- NAS1149F0463P/62789

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B	100%	PRESENCE OF DOCUMENTS (4)	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: J. Barbeau			Date: 08.12.18

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
081218	1 PAIR.	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: J. Barbeau	Date: 081218
Comments:		
081218-01		

Helitowcart - RELEASE INSPECTION general	F40-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
		BP350	HTC-LNF- HTC-LNF-yymmdd-seq
Includes:			
			LN-
			LN-
			LN-
			LN-
			LN-
		FILLER BLOCKS	LN-
		ENDS + NUTS	LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A			
B			
C			
D			
E			
Inspection Plan approved by:		Date:	

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes

Release certificates issue

Release Certificates issued: yes no	By:	Date:
Comments:		

Traceability data

Qty	Part No.	Desc:	Lot number
5 PAIRS	112-0002.00.B-S	BP350-S STREAMLINE	HTC-LNF- 080522-01 HTC-LNF-yymmdd-seq
Includes:			
10	314.0018.01.C	BEARAW PAD STREAMLINE	LN- 080312-01
30	314.0019.15.A	U-SHAPED CLIPS	LN- 080807-01 (PB)
60	314.0007.15.B	SLOTTED CLIP SUPPORT	LN- 071206-01
40	312.0002.15.A	ICEBLADE ASSY	LN- 070818-01
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B	100%	PRESENCE OF DOCUMENTS(4)	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by:			Date:

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
08 05 22	5 Kits	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: D. Bateau	Date: 08.05.22
Comments:		
08 05 22 - 01 - 02 - 03 - 04 - 05		
• HELI CAN INFORMED TO PIERCE GVENT HOLES PER PAD. AUG 11, 2008. NB. REFECO# 5. "SERV. BULLETIN 080811 rev. a" ALL 5 KITS SOLD TO HELI CAN		

Traceability data

Qty	Part No.	Desc:	Lot number
NB 5 PAIRS	112.0002.00.B	BP 350-S -STREAMLINE-	HTC-LNF- 080312 - 01 HTC-LNF-yymmdd-seq
Includes:			
NB 10	314.0018.01. (C)	BEARPAW PAD STREAMLINE	LN- 080312 - 01
NB 30	314.0019.15.A	U SHAPED CLIPS	LN- 080807 - 01 (P)
NB 60	314.0007.15.B	SLOTTED CLIP SUPPORT	LN- 070126-02
NB 40	312.0002.15.A	ICEBLADE ASSY	LN- 070818-01
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B	100%	PRESENCE OF DOCUMENTS (4)	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by:			Date:

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
08.03.12	10 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: D. Barber	Date: 080312
Comments:		
HELI CAN OWN THESE 3 PAIRS. SEE SERV. BULLETIN #080811 rev. a. REF ECO #3.		
080312-01		
080312-02		
080312-03		
080312-04		
080312-05		

Lo Hoses Per PAD PENCE FOR VENTS
 Modified PADS TO ECO#3
 " " " " " "
 Dorian Barber 20080918

Traceability data

Qty	Part No.	Desc:	Lot number
1 ^{PAIR}	112-0002-00-B S	BP350-S (STREAMLINE)	HTC-LNF- 08 03 11- 01 HTC-LNF-yymmdd-seq
Includes:			
2	314-0018-01 (C)	BEARPAW PAD STREAMLINE	LN- 08 02 11- 01
6	314-0019-15 A	4 SHAPED CLIPS	LN- 08 08 07- 01 (20)
12	314-0007-15 B	SLOTTED CLIP SUPPORT	LN- 07 01 26- 02
8	312-0002-15 A	ICE BLADES ASSY	LN- 07 08 18- 01
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B	"	PRESENCE OF DOCUMENTS	
C	"	ALL LN MATCH PARTS FOR LOT	
D	"	ALL COMPONENTS INTO BAGS	
E	"	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: <u>D. Balleau</u>			Date: 08 03. 11

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
		OK NB		OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: <u>D. Balleau</u>	Date: <u>08 03 11.</u>
Comments:		
<p>x: 08 03 11- 01 →</p> <div style="border: 1px solid black; padding: 5px; display: inline-block;"> <p>HEU CAN INFORMETTO PIERCE VENT HOLES, SERV. BULLETIN 080811 NOV. 01 REF ECO #3 / NB 08 09 16</p> </div>		

Traceability data

Qty	Part No.	Desc:	Lot number
2 PAIRS	112.0002.00.B	BP350 BEARPAW Assy	HTC-LNF- 080309-01 HTC-LNF-yymmdd-seq
Includes:			
4	314.0018.01.B	BEARPAW PAD	LN- 061115-06 (NB)
12	314.0019.15A	U-SHAPED CLIPS	LN- 080807-01 (NB)
24	314.0007.15B	SLOTTED CLIP SUPPORT	LN- 070126-02
16	312.0002.15A	ICEBRADES Assy	LN- 070818-01
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBRADES	
B	100%	PRESENCE OF DOCUMENTS (A)	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by:			Date:

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
080309	4 LNS	OK NB	OK NB	OK NB	OK NB	OK PB	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: J. Barbeau	Date: 080309
Comments:		
<p>080309-01</p> <p>080309-02</p>		

BP350 PAD

314-0018-01-B

LN-061115-06

Qty: 40

BATCH 1

APR 11 2006

Traceability data

Qty	Part No.	Desc:	Lot number
1 PAIR NB	112-0002-00-B-S	BP350-S (STREAMLINED)	HTC-LNF-080211-01 HTC-LNF-yymmdd-seq
Includes:			
2 NB	314-0018-01-C	BEARPAW PAD STREAMLINED	LN- 080211-01
6 NB	314-0019-15 A	U SHAPED CLIPS	LN- 061114-05
12 NB	314-0007-15 B	SLOTTED CLIP SUPPORT	LN- 070126-02
8 NB	312-0002-15 A	ICEBLADES ASSY	LN- 070818-01
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B	100%	PRESENCE OF DOCUMENTS (4)	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: N. Barleau			Date: 080211

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
080211	1 PAIR	OK NB	OK NB	OK NB	OK NB	OK	

Release certificates issue

Release Certificates issued: yes no	By: N. Barleau	Date: 080211
Comments:		
1x 080211-01		
<div style="border: 1px solid black; padding: 5px; display: inline-block;"> HELI CAN INFORMED TO PIERCE VENT HOLES SEE SERV. BULLETIN 080811 rev A REF ECO#3 </div>		

Traceability data

Qty	Part No.	Desc:	Lot number
3 PAIRS	112.0002.00-B	BP350 BEARPAW ASSY	HTC-LNF- 071110-01 HTC-LNF-yymmdd-seq
Includes:			
6	314.0018.01 B	BEARPAW PAD	LN- 061114-06
18	314.0019.15 A	U SHAPED CLIPS	LN- 061114-05
36	314.0007.15 B	SLOTTED CLIP SUPPORT	LN- 061114-01
24	312.0002.15-A	ICE BLADES ASSY	LN- 070818-01
			LN-
			LN-
			LN-

Inspection Plan

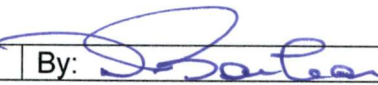
Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	
B	100%	PRESENCE OF DOCUMENTS (4)	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by:			Date:

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2007.11.10	3PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued. yes no	By: 	Date: 2007.11.10
Comments:		
<p>RELEASE CERTIFICATE ISSUED:</p> <p>HTC - <u>071110-01</u>, 02, 03.</p>		

Traceability data

Qty	Part No.	Desc:	Lot number
3 PAIRS	112.0002.00-B	BP350 BEARPAW ASSY	HTC-LNF- 071102 - 01 HTC-LNF-yymmdd-seq
Includes:			
6	314.0018.01B	BEARPAW PAD	LN- 061114-06
18	314.0019.15A	U SHAPED CLIPS	LN- 061114-05
36	314.0007.15B	SLOTTED CLIP SUPPORTS	LN- 061114-01
24	314.0002.15A	ICE BLADE AS	LN- 061114-03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICE BLADES	
B	100%	PRESENCE OF DOCUMENTS (4)	
C	100%	ALL LN MATCH PARTS FOR LOT	
D	100%	ALL COMPONENTS INTO BAGS	
E	100%	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by:			Date:

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2007.11.02	3 PAIRS	OK	OK	OK	OK	OK	

Release certificates issue

Release Certificates issued: <input checked="" type="checkbox"/> yes <input type="checkbox"/> no	By: <i>[Signature]</i>	Date: 2007.11.02
Comments:		
<p>RELEASE CERTIFICATES ISSUED:</p> <p>HTC.RC. <u>071102-01</u>, 02, 03</p>		

Traceability data

Qty	Part No.	Desc:	Lot number
6 PAIRS	112-0002-00-B	BP350 BEARPAW ASSY	HTC-LNF-070614-01 HTC-LNF-yymmdd-seq
Includes:			
12	314.0018.01-B	BEARPAW PAD	LN-061114-06
36	314.0019.15-A	L SHAPED CLIPS	LN-061114-05
72	314.0007.15 B	SCOTED CLIP SUPPORT	LN-061114-01
48	314.0002.15 A	ICE BLADE ASSY	LN-061114-03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100 %	PRESENCE OF ICEBLADES	ICE BLADES INSTALLED
B	100 %	PRESENCE OF DOCUMENTS	3 doc: 1) SHOG24 2) MASTER DOCCIST 3) INST
C	100 %	ALL IN MATCH PARTS FOR LOT	"
D	100 %	ALL COMPONENTS INTO BAGS	"
E	100 %	BOX APPROPRIATELY IDENTIFIED	"

Inspection Plan approved by: N. Barbeau Date: 2007.06.14

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
2007.06.14	6 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: N. BARBEAU	Date: 2007.06.14
Comments: <u>RELEASE CERTIFICATE ISSUED:</u>		
HTC-RC-070614-01		
" 02		
" 03		
" 04		
" 05		
" 06		

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Reviewed & approved by:		2006 09 09

Traceability data

Qty	Part No.	Desc:	Lot number
2 PAIRS	112.0002.00.B	BP350 BEARPAW ASSEMBLY	HTC-LNF- 070315-01 HTC-LNF-yymmdd-seq
Includes:			
4	314.0018.01-B	BEARPAW PAD	LN-061115-06
12	314.0019.15-A	L SHAPED CLIP	LN-061114.05
24	314.0007.15-B	SLOTTED CLIP SUPPORT	LN-061114.01
16	314.0002.15-A	ICE BLADE ASSY	LN-061114.03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	ICEBLADES INSTALLED
B	100%	PRESENCE OF DOCUMENTS	ALL 3DOP IN BAG: SHOG24, MAST. DOC LIST
C	100%	ALL LN MATCH USED PARTS FOR LOT	"
D	100%	ALL COMPONENTS INTO BAGS	"
E	100%	Box APPROPRIATELY IDENTIFIED	"
Inspection Plan approved by:			Date:

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
2007.03.15	2 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: Nathaniel Barteau	Date: 2007.03.15
Comments:		
<p>HTC. RC. 070315-01 HTC. RC. 070315-02 issued.</p>		

Traceability data

Qty	Part No.	Desc:	Lot number
2 PAIRS	112-0002-00-B	BP350 BEARPAW ASSEMBLY	HTC-LNF- 061220-01 HTC-LNF-yymmdd-seq
Includes:			
4	314-0018-01-B	BEARPAW PAD	LN- 061115-06
12	314-0019-15-A	BEARPAW U-SHAPED CLIP	LN- 061114-05
24	314-0007-15-B	BEARPAW SLOTTED CLIP	LN- 061114-01
16	314-0002-15-A	BEARPAW ICE BLADE ASSY	LN- 061114-03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	ICEBLADES INSTALLED
B	100%	PRESENCE OF DOCUMENTS	ALL 3 DOC IN BAG: INST+CERT+LIST
C	100%	ALL LN MATCH USED PARTS FOLLOT	SAME NEW
D	100%	ALL COMPONENTS INTO BAGS	11* (BOX TOO SMALL TO INSTALL
E	100%	Box APPROPRIATELY IDENTIFIED	11 COMPONENTS. COMPTS SHIPPED UNASSEMBLED)

Inspection Plan approved by: N. Baile

Date: 2006.12.20

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
2006.12.20	2 PAIRS	OK NB	OK NB	OK NB	OK NB	OK NB	

Release certificates issue

Release Certificates issued: yes no	By: <u>Nathalie Baile</u>	Date: <u>2006.12.20</u>
Comments:		
<p>HTC-RC-061220-01</p> <p>" " " - 02</p>		

Traceability data

Qty	Part No.	Desc:	Lot number
1 PAIR	112-0002-00.B	BP350 BEARPAW ASSEMBLY	HTC-LNF- 061115- 01 HTC-LNF-yymmdd-seq
Includes:			
2	314-0018-01-B	BEARPAW PAD	LN- 061115- 06
6	314-0019-15-A	BEARPAW LI-SHARDED CLIP	LN- 061114- 05
12	314-0007-15-B	BEARPAW SLOTTED CLIP SUPP	LN- 061114- 01
8	314-0002-15-A	BEARPAW ICE BLADE ASSY	LN- 061114- 03
			LN-
			LN-
			LN-

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ICEBLADES	ICE BLADES INSTALLED
B	100%	PRESENCE OF DOCUMENTS	ALL 3 DOC. IN BAG: INSTR/CERTIF/LIST PARTS
C	100%	ALL LN MATCH USED PARTS FOR LOT	SAME
D	100%	ALL COMPONENTS PRESENT ON PADS	—
E	100%	Box APPROPRIATELY IDENTIFIED	—
Inspection Plan approved by: <i>N. Bouteau</i>			Date: 2006.11.15

Inspection Records

Ok = ✓+initials

Date:	Quantity	A	B	C	D	E	Notes
2006.11.15	1 PAIR	OK NB	X	OK NB	OK NB	X	
(NOT AVAILABLE YET - KIT FOR TEST)						N/A →	BP. KIT FOR TESTS.

Release certificates issue

Release Certificates issued: yes no	By:	Date:
Comments:		

BP130 LNF Insp

Traceability data

Qty	Part No.	Desc:	Lot number
10 Pairs	112 0005 00 A	BP130 BEARPAW ASS'y	HTC-LNF- 110620-01 HTC-LNF-yymmdd-seq
Includes:			
SEE ATTACHED EXCEL SHEET			LN-
FOR DETAILLED LIST OF COMPONENTS			LN-
			LN-
			LN-
			LN-
			LN-
			LN-

Audit TC 2013

Inspection Plan

Aspect	Sampling	Inspection	Acceptance parameters
A	100%	PRESENCE OF ALL COMPONENT TYPES	
B	"	PRESENCE OF DOCUMENTS	
C	"	ALL LN MATCH USED PARTS	
D	"	ALL COMPONENTS IN CORRECT QTY	
E	"	BOX APPROPRIATELY IDENTIFIED	
Inspection Plan approved by: D. Baileau			Date: 2011 06 14

Inspection Records

Ok = T+initials

Date:	Quantity	A	B	C	D	E	Notes
	10 Pairs	OK	OK	OK	OK	OK	US STC NOT YET RECEIVED
							NCR

Release certificates issue

Release Certificates issued: yes no	By: D. Baileau	Date: 2011 08 25
Comments:		
<p>*NCR 2011-08-17-nb-01 : Bearpaw PADS DEROGATION: OK</p> <p>*NOTE: US STC NOT YET RECEIVED</p>		

August 25, 2011

Object: Additional fillers to ensure Tightness as needed

To whom concerned,

A derogation was issued for the Bearpaw pads you have in hand. Zone B has been manufactured slightly thinner than specified nominal value of 1". Rest assured that thickness is still within tolerance.

To ensure that you can attach U-clips and L-clips with optimal tightness to skids we thus offer additional fillers called Slotted Clip Supports. This will allow to cover for the slight pad thickness variation if needed.

We recommend you install the additional fillers just before inserting the U-Clips and U-Clips as needed only.

Find attached a lot of additional Slotted Clip Supports for your possible needs.

We invite you to contact us should you required further information

Kind Regards



Nathalie Barbeau,
Quality Assurance Director
Helitowcart

NOTE:

THIS LETTER WAS INSERTED
INTO BAG WITH 24 SLOTTED
CLIP SUPPORT EACH.

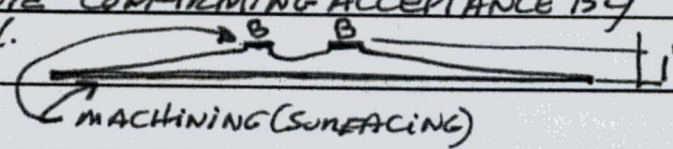
LNF-110620-01_BP130_InfoLetter_Add_fillers_(2011_08_25)

Helitowcart – NON CONFORMITY report	F80-02	Page 1 of 1
Reviewed & approved by:		2006 09 09

Section A - Non conformity description

Product / Output: BP130 - PADS	NCR: 2011-08-17-nb-01 yyyy-mm-dd-initials-#
Product no: 314-0024-01	ASS no: —
Non conformities:	CARPAR no: —
① AMEC INFORMS THAT ^{1" THICK} SHEETS OF CHMW ARE NOT NICE. THEY WILL NEED TO MACHINE BOTH SIDES. THIS HAS IMPACT ON THICKNESS. HOW MUCH CAN THEY MACHINE? NOTE: - DUGS TOLERANCE NOT THERE FOR 1X. (ONLY SHOWS XX + XXX)	
	Supplier: AMEC
	Supplier ref no: 100904
	Quantity rejected: NOT MADE YET
Initiated by: N. Barleau Date: 2011	Quantity in the lot: 16/20

Section B – Prescribed disposition

Decision & notes: I CHECKED WITH SIMON AT AVIATECH. WE HAVE MARGIN ON THICKNESS ON ZONE B. SEG - 0,250 TOL FOR WEAR IN INSTALL INSTR. 314-0031-00A.P. 6/11 + 11/11 SUPPLIERS ASKS FOR - 0,100 / ACCEPTED	<input type="checkbox"/> Wait <input type="checkbox"/> Discard <input type="checkbox"/> Return to supplier	<input type="checkbox"/> Repair <input type="checkbox"/> Use as is <input checked="" type="checkbox"/> Derogation (=use as is with or without repair)
Actions	Resp	Verified by
1) PROVIDE NOTE CONFIRMING ACCEPTANCE BY DEROGATION. 	DR TOL. WEAR 0.250	DEROG. - 0,100
2) ADD WASHERS TO BATCH TO COMPENSATE FOR LOSS OF THICKNESS IN B ZONE	DR STILL 0,150 SAFETY MARGIN FOR WEAR	
Prescribed by: N. Barleau Date: 2011 08 17		

Section C – Final verification

Decision & notes: THIS DEROGATION ALLOWS TO USE A BATCH OF RAW MATERIAL THAT HAS A BAD LOOKING FINISH. THE SURFACING REQ'D HAS IS ON THE THICKEST PART & WITHIN TOLERANCES.
Closed by: N. Barleau Date: 2011 08 23